July 17, 2007

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

SUBJECT: TURKEY POINT PLANT, UNITS 3 AND 4 - ISSUANCE OF AMENDMENTS REGARDING SPENT FUEL POOL BORAFLEX REMEDY (TAC NO. MC9740 AND MC9741)

Dear Mr. Stall:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 234 to Renewed Facility Operating License No. DPR-31 for the Turkey Point Plant, Unit No. 3, and Amendment No. 229 to Renewed Facility Operating License No. DPR-41 for the Turkey Point Plant, Unit No. 4. These amendments consist of changes to the Technical Specifications (TS) in response to your License Amendment Request No.178 dated January 27, 2006, as supplemented by letters dated November 28, 2006, April 30, 2007, and July 17, 2007.

The amendments revise TS Section 3/4 9.1, "Boron Concentration," Section 3/4 9.14, "Spent Fuel Storage," and Section 3/4 5.5.1, "Fuel Storage Criticality." The Boraflex neutron absorber, in Turkey Point Units 3 and 4 spent fuel pool storage racks, will be replaced by a combination of rod cluster control assemblies, Metamic™ rack inserts, and administrative controls that require mixing higher reactivity fuel with lower-reactivity fuel.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Brenda L. Mozafari, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosures:
1. Amendment No. 234 to DPR-31
2. Amendment No. 229 to DPR-41
3. Safety Evaluation

cc w/enclosures: See next page

July 17, 2007

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

SUBJECT: TURKEY POINT PLANT, UNITS 3 AND 4 - ISSUANCE OF AMENDMENTS REGARDING SPENT FUEL POOL BORAFLEX REMEDY (TAC NO. MC9740 AND MC9741)

Dear Mr. Stall:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 234 to Renewed Facility Operating License No. DPR-31 for the Turkey Point Plant, Unit No. 3, and Amendment No. 229 to Renewed Facility Operating License No. DPR-41 for the Turkey Point Plant, Unit No. 4. These amendments consist of changes to the Technical Specifications (TS) in response to your License Amendment Request No.178 dated January 27, 2006, as supplemented by letters dated November 28, 2006, April 30, 2007, and July 17, 2007.

The amendments revise TS Section 3/4 9.1, "Boron Concentration," Section 3/4 9.14, "Spent Fuel Storage," and Section 3/4 5.5.1, "Fuel Storage Criticality." The Boraflex neutron absorber, in Turkey Point Units 3 and 4 spent fuel pool storage racks, will be replaced by a combination of rod cluster control assemblies, Metamic™ rack inserts, and administrative controls that require mixing higher reactivity fuel with lower-reactivity fuel.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,
/RA/

Brenda L. Mozafari, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosures: 1. Amendment No. 234 to DPR-31
2. Amendment No. 229 to DPR-41
3. Safety Evaluation

cc w/enclosures: See next page

Distribution:
PUBLIC
JMa, NRO
GThomas, NRO
YOrechwa, NRO
LPL2-2 R/F
RidsAcrsAcnwMailCenter
RidsNrrDorlDpr
GHill, OSI (4 hard copies)
AStubbs, NRR
RidsNrrDorlLpl2-2
LMiller, NRR
RidsRgn2MailCenter
RidsNrrDssSnpb
RidsOgcRp
RidsNrrLABClayton
RidsNrrPMBMozafari
RidsNrrDciCsgb
RidsNrrDeEmcb
RidsNrrDssSbpb

Package: ML071800411 TS and License Pages: ML072040316
ADAMS Accession No.: ML071800198 NRR-058

OFFICE	LPL2-2:PM	LPL2-2:LA	DCI/CSG:BC	DSS/SBPB:BC	SNPB/DSS:BC(A)	DE/EMBC:BC	OGC	DORL/LPL2-2:BC
NAME	BMozafari	BClayton	AHiser	JSegala	RLandry	KManoly	*STurk	SBailey for TBoyce
DATE	07/17/07	07/17/07	by memo dated 05/17/07	by memo dated 11/06/06	by memo dated 10/25/06	by memo dated 06/26/07	07/12/07	07/17/07

OFFICIAL RECORD COPY *NLO with changes

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT, UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 234
Renewed License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power and Light Company (the licensee) dated January 27, 2006, as supplemented November 28, 2006, April 30, 2007, and July 17, 2007, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-31 is hereby amended to read as follows:

   (B) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 234, are hereby incorporated in the license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented prior to the end of Turkey Point Unit 4 Cycle 24.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA S. Bailey for/

Thomas H. Boyce, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: 234
Changes to the License
and Technical Specifications

Date of Issuance: July 17, 2007

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT, UNIT NO. 4

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 229
Renewed License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power and Light Company (the licensee) dated January 27, 2006, as supplemented November 28, 2006, April 30, 2007, and July 17, 2007, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-41 is hereby amended to read as follows:

   2. <u>Technical Specifications and Environmental Protection Plan</u>

      The Technical Specifications contained in Appendix A, as revised through Amendment No. 229, are hereby incorporated in the license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

4. This license amendment is effective as of its date of issuance and shall be implemented prior to the end of Turkey Point Unit4 Cycle 24.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA S. Bailey for/

Thomas H. Boyce, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: 229
Changes to the License
and Technical Specifications

Date of Issuance: July 17, 2007

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 234 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 229 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Replace Page 3 of Renewed Facility Operating License DPR-31 with the attached Page 3.

Replace Page 3 of Renewed Facility Operating License DPR-41 with the attached Page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment numbers and contain marginal lines indicating the areas of change.

Remove page	Insert page
xiii	xiii
xiv	xiv
3/4 9-1	3/4 9-1
3/4 9-15	3/4 9-15
5-5	5-5
5-6	5-6
5-7	5-7
---	5-8
---	5-9
---	5-10
---	5-11
---	5-12
---	5-13
---	5-14
---	5-15
---	5-16
---	5-17
---	5-18
----	5-19

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 234 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-31

AND

AMENDMENT NO. 229 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

1.0 INTRODUCTION

By letter to the U.S. Nuclear Regulatory Commission (NRC), dated January 27, 2006, as supplemented by letters dated November 28, 2006, April 30, 2007, and July 17, 2007, Florida Power and Light Company (FPL, the licensee) submitted a request for review and approval of an amendment to the Turkey Point Unit 3 (TP3) Renewed Operating License (DPR-31) and Turkey Point Unit 4 (TP4) Renewed Operating License (DPR-41). The proposed amendments would revise Technical Specifications (TS) in 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™ rack inserts.

The supplements dated November 28, 2006, April 30, 2007, and July 17, 2007, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on May 9, 2006 (71 FR 26999).

2.0 REGULATORY EVALUATION

2.1 Light Load Handling Regulatory Basis

Section 9.1.4 of NUREG-0800 “Standard Review Plan” (SRP) provides guidance applicable to light load handling related to refueling. The review criteria in the SRP section ensure that the light load handling system design is reliable and that the consequences of potential light load drops are bounded by the analyzed consequences of the design basis fuel handling accident.

2.2 Boron Dilution Regulatory Basis

Appendix A of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, General Design Criterion (GDC) 62, “Prevention of criticality in fuel storage and handling,” states, “Criticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations.” In SRP section 9.1.2, the NRC has established a 5-percent subcriticality margin (K-effective $\leq$ 0.95) for nuclear power plant operators to comply with GDC 62.

The regulations in 10 CFR 50.68 “Criticality accident requirements,” Section 50.68(b)(4) states, “If credit is taken for soluble boron, the k-effective of the spent fuel storage racks loaded with fuel of the maximum fuel assembly reactivity must not exceed 0.95, at a 95 percent probability, 95 percent confidence level, if flooded with borated water, and the k-effective must remain below 1.0 (subcritical), at a 95 percent confidence level if flooded with unborated water.”

The NRC staff, in a safety evaluation dated October 25, 1996, accepted Westinghouse Owners Group Topical Report WCAP-14416-P in licensing applications to credit soluble boron in spent fuel pool (SFP) criticality analyses. The review and acceptance of WCAP-14416-P focused on the methodology whereby credit could be taken for soluble boron in the SFP to meet the NRC criterion. All licensees proposing to use this method for soluble boron credit were advised to identify potential events which could dilute the SFP soluble boron to the concentration required to maintain the 0.95 k-effective limit. They were also advised to quantify the time span of these dilution events to show that sufficient time is available to enable detection and mitigation of any dilution event.

The information provided by the licensee in its license amendment request, along with the applicable design basis information in the Turkey Point Updated Final Safety Analysis Report (UFSAR) provide the information needed to evaluate the ability of equipment to comply with 10 CFR 50.68 and the NRC-approved WCAP recommendations, as related to the proposed license amendments.

2.3 Spent Fuel Pool Cooling Regulatory Basis

Appendix A of 10 CFR Part 50, General Design Criterion (GDC) 61, prevention of criticality in fuel storage and handling and radioactivity control, specifies, in part, that fuel storage systems shall be designed with residual heat removal capability having reliability and testability that reflects the importance to safety of decay heat removal, and with the capability to prevent significant reduction in fuel storage coolant inventory under accident conditions.

GDC 62, “Prevention of criticality in fuel storage and handling,” states that criticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations. The licensee must limit the potential for criticality in the fuel-handling building and storage system by physical systems or processes.

The SFP cooling system is described in Chapter 9 of the Turkey Point UFSAR. Section 9.5.3 provides design basis information for the SFP, including the SFP temperature limits for both normal (planned) and abnormal (emergency) refueling scenarios. The system description, along with the applicable design basis information included in Chapter 9, provide the information needed to evaluate the impact that the increased SFP heat load has on the ability of the SFP system to comply with the plant design basis and GDC 61.

In meeting the criteria, the licensee should demonstrate that sufficient SFP cooling capacity and make-up sources are available during planned and unplanned (emergency) offload conditions and time is available prior to pool boiling to supply makeup during unplanned offload conditions.

The NRC has defined acceptable methodologies for performing SFP criticality analyses in three documents:

1. NUREG-0800, Standard Review Plan, Section 9.1.2, “Spent Fuel Storage,” Draft Revision 4.

2. Proposed Revision 2 to Regulatory Guide 1.13, “Spent Fuel storage Facility Design Basis.”

3. Memorandum from L. Kopp (NRC) to T. Collins (NRC), “Guidance on the Regulatory Requirements for criticality analysis of Fuel Storage at Light-Water Reactor Power Plants.”

Turkey Point Unit 3 and Unit 4 SFP currently use a “Distinct Zone Two Region” rack design that is described in Attachment 10 of the licensee’s January 27, 2006, application, wherein Region I is designed for storing fresh fuel and Region II for storing irradiated fuel. Each of the Unit 3 and Unit 4 SFPs is currently licensed for no more than 1404 assemblies in the two region storage racks, and no more than 131 fuel assemblies in the Cask Area Rack. TP3 and TP4 SFP storage racks rely on Boraflex, a neutron absorber material, to ensure that the subcriticality requirements of the TS and 10 CFR 50.68 (b)(4) are met. Boraflex has exhibited continual degradation in light-water reactor SFPs, and the degradation of Boraflex has been addressed by the NRC in Generic Letter 96-04. This degradation is being monitored at Turkey Point. Although current surveillance results show that the degradation is bounded by the conservative assumptions in the current design basis criticality analysis and that the TS requirements are met, further degradation could reduce neutron absorber performance below the racks’ design basis requirements and restrict the use of some storage cells.

The NRC has previously addressed the need to preclude the possible loss of storage cells in an SFP due to Boraflex degradation. First, the NRC issued a safety evaluation for St. Lucie Unit 1, that allowed credit for soluble boron, fuel loading restrictions, and control-element assemblies in lieu of credit for Boraflex neutron absorbing material for reactivity control and the concomitant SFP criticality analyses. Second, the NRC issued a topical safety evaluation that established the use of Metamic™ in fuel pool applications. At Turkey Point, the Boraflex panels will remain in place providing additional (albeit diminished) neutron absorption in the storage array after the implementation of the Boraflex remedy based on Metamic™ inserts. However, for the criticality evaluation, the presence of Boraflex is not taken into account.

2.4 Structural/Seismic Regulatory Basis

The NRC staff’s regulatory guidance for design modifications of the SFP and storage racks are documented in Enclosure 1 to NRC Letter, Docket No. 50-289, dated April 14, 1978, entitled: “OT Position for Review and Acceptance of Spent Fuel Storage and Handling Applications” with Addendum dated January 18, 1979, Office of Technology (OT) Position paper, and NUREG-0800 Standard Review Plan (SRP), Section 3.8.4, “Other Seismic Category I Structures,” and Appendix D to SRP Section 3.8.4, “Technical Position on Spent Fuel Racks,” dated July 1981.

Based on the guidance in Section II of the SRP Section 3.8.4, the structural analyses and design evaluation of the SFP structure and the fuel storage racks affected by this License Amendment Request (LAR) must meet the regulatory requirements of 10 CFR Part 50 Appendix A “General Design Criteria for Nuclear Power Plants”: Criterion 1, as it relates to safety-related structures being designed, fabricated, erected and tested to quality standards commensurate with the importance of the safety function to be performed; Criterion 2, as it relates to the design of the safety-related structures being capable to withstand the most severe natural phenomena, such as earthquakes, wind, tornadoes, floods and the appropriate combination of all loads; and Criterion 4, as it relates to design bases for environmental and dynamic effects.

3.0 TECHNICAL EVALUATION

By letter dated January 27, 2006, as supplemented by letters dated November 28, 2006, and April 30, 2007, Florida Power and Light Company submitted a request for review and approval of an amendment to Operating License DPR-31 and Operating License DPR-41. The proposed amendments would revise TS in 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™ rack inserts. The proposed TS changes are described by the licensee in broad terms, as follows:

> TS 3/4.9.1, "Refueling Operations - Boron Concentration." The Surveillance Requirement (SR) for SFP boron concentration is being removed because it is redundant.
>
> TS 3/4.9.14 "Refueling Operations - Spent Fuel Storage." The Limiting Condition for Operation (LCO), SR, and Actions are being revised to accomplish the following:
>
> > * Add cooling time to the list of parameters that constrain fuel storage in Region II, and refer to Specification 5.5.1 rather than Table 3.9.1 for the description of loading restrictions.
> >
> > * Relocate the maximum fuel enrichment limit to the Design Features.
> >
> > * Clarify that reactor shutdown actions pursuant to TS 3.0.3 are not applicable to the SFP.
> >
> > * Add new SR to perform visual inspection of a representative sample of Metamic™ inserts.
>
> TS 5.5.1 "Design Features - Fuel Storage - Criticality."
>
> The Design Features are being revised to accomplish the following:
>
> > * Establish fuel assembly categories to rank their reactivity for use in the proposed rack loading patterns defined in the Design Features. The category of a fuel assembly is based on its initial enrichment, burnup history, cooling time, and the presence or absence of fuel blankets in the design.
> >
> > * Establish fuel loading restrictions.

* Establish the use of Metamic™ inserts, full-length rod control cluster assemblies, and water-filled rack cells in the rack loading configurations to meet subcriticality requirements.

* Establish the opportunity to use alternative loading configurations that conform to the NRC-approved methodology.

The proposed license amendments remove reliance on Boraflex as a neutron absorber in TP3 and TP4 SFP storage racks. To preclude the continued loss of reactivity margin due to the ongoing degradation of Boraflex, the neutron absorbing function currently performed by Boraflex will be replaced by a combination of rod cluster control assemblies, fuel loading patterns, Metamic™ rack inserts, and a Metamic™ surveillance program that would replace the existing Boraflex surveillance program. Furthermore administrative controls will be introduced that require mixing higher reactivity fuel with lower reactivity fuel.

3.1 Light Load Handling

To implement the proposed TS amendments, a significant fuel movement and Metamic™ insert loading campaign will be required. The campaign could involve several hundred assembly relocations, some requiring use of the "nozzle-less" fuel-handling tool to preclude top nozzle separation on susceptible Westinghouse fuel assemblies. The handling campaign will also introduce the possibility of a fuel-handling accident or the inadvertent dropping of a Metamic™ insert.

In Section 3.7 of Attachment 1 of the amendment request, the licensee states that the proposed amendment will employ the same equipment and process to handle fuel assemblies that are currently used. The only new operations introduced are those associated with inserting and removing the Metamic™ inserts. Those operations introduce to the SFP only the Metamic™inserts and their handling tools, both of which are relatively small and lightweight objects. Together, the inserts plus tools will weigh less than 100 pounds (lb) and offer a size comparable to a fuel assembly. The licensee has also indicated that the inserts will be initially introduced and installed in the storage racks using the fuel bridge and same lifting paths as used to bring new fuel into the pool.

The licensee stated that the fuel movement and Metamic™ insert loading campaign will use existing equipment and procedures to safely handle fuel and Metamic™inserts. The proposed amendments do not change or modify the fuel, fuel-handling process, spent fuel storage racks, number of fuel assemblies to be stored in the SFP, decay heat generation rate, or performance of the SFP cooling and cleanup system. Therefore, the handling process does not create the risk of an accident or consequence greater than the fuel-handling accident, and the licensing basis fuel-handling accident will continue to be bounding. As such the existing light load (fuel) handling system will continue to satisfy Section 9.1.4 of the SRP, for the fuel movement and loading campaign. Therefore, the NRC staff finds that the proposed handling process is acceptable.

3.2 Structural/Seismic Evaluation of the Existing Spent Fuel Storage Racks

3.2.1 Description of Rack Re-analysis with Metamic™ inserts

In Section 6.0 of Attachment 9 to the licensee's request, the licensee examined the structural adequacy of the Turkey Point SFP racks after Metamic™ inserts have been added to all existing racks, other than the rack in the Cask Area. The loadings postulated to occur during normal, seismic and fuel-handling-accident conditions were considered for the analysis. Loads on the fuel storage racks were analyzed. The racks were licensed for use in the 1980s. The licensee stated that the existing rack design includes substantial margins of safety. The licensee also stated that the net effect of the proposed modification to add Metamic™ inserts is that the weight of the racks, when loaded with fuel, increases by approximately 1 percent.

The licensee performed a re-analysis of the rack seismic performance using Holtec's more rigorous Whole-Pool Multi-Rack (WPMR) analysis technique using the DYNARACK solver computer code. The purpose of the re-analysis was to validate the current licensing basis and to better quantify the available safety margin. The WPMR methodology used 3-D dynamic models to perform nonlinear time-history analyses of the Region II racks, with Metamic™ inserts, subjected to synthetic time-histories generated, in accordance with SRP Section 3.7.1, for safe-shutdown earthquake (SSE) and operating-basis earthquake (OBE) events. These models include the assemblage of all rack modules in the pool and incorporate all appropriate fluid coupling interactions, mechanical coupling and parametric variations. The licensee cited examples where the Holtec methodology has been previously used for fuel rack applications and accepted by the NRC for several plants. The rack seismic analyses were performed in compliance with the NRC SRP and the OT Position Paper. For each of the analyses, the licensee discussed the methodology, the modeling, assumptions, material data, key results, relevant criteria and a summary of parametric evaluations.

The licensee stated that the Metamic™ inserts will only be installed in Region II racks in approximately 50 percent of the cells. The weight of a Metamic™ insert is approximately 24 lb, in comparison to the approximately 1608 lb weight of a fuel assembly. The governing rack structural analyses considered an insert to be present in every Region II cell. This is conservative for the structural evaluation because it maximizes the total weight of the racks, which in turn maximizes the seismic response as well as the rack pedestal loads.

3.2.2 Acceptance Criteria for Rack Re-analysis Structural Evaluation

The applicable loads and loading combinations considered in the seismic analysis of the rack modules and acceptance criteria are based on the OT Position paper and SRP, Section 3.8.4. These are consistent with the current design basis in the UFSAR. The acceptance criteria used to assess safety margin against rack overturning under the OBE and SSE events were 1.5 and 1.1, respectively, based on Section 3.8.5-II-5 of the SRP. The acceptance criteria for stress limits on the rack structure for Level A (normal conditions), Level B (upset conditions, including OBE) and Level D (including SSE) service limits were based in ASME Code, Section III, Division 1, Subsection NF.

3.2.3 Results of Rack Re-analysis and Structural Evaluation

The licensee reported the summary of the results of the time-history simulations for the major parameters of interest in the "RESULT TABLE" in Section 6.8 and discussed these results in Sections 6.8 and 6.9 of Attachment 9 to the LAR. The governing results are summarized below:

The maximum rack displacement is 0.249 inch and occurs at the top corner of the rack. Since the typical spacing between rack modules is 2.5 inches, the racks will not impact each other. The licensee reported that rack-to-wall impact would also not occur.

The licensee reported that safety margins against rack overturning were greater than 1.5 for both OBE and SSE load conditions, which satisfies the SRP Section 3.8.5-II-5 requirement.

The licensee reported that the maximum rack stress occurs at the interface of the rack and the baseplate, and the magnitude of the stress is 0.171 times the ASME code allowable stress. The maximum shear stress on the pedestal threads (male and female) is 4504 pounds per square inch (psi), which is below the allowable stress of 8520 psi (for Level A conditions) and 15,336 psi (for Level D conditions). The maximum stress in the baseplate-to-rack cell welds has a safety factor of 1.945. The maximum stresses in the baseplate-to-pedestal welds and the cell-to-cell welds have a safety factor of 5.7. The margin of safety against local cell wall buckling is more than 3.

The licensee reported that the maximum impact (rattling) load between a fuel assembly and a storage cell wall is 310 lb force (lbf). The storage cell wall was shown to remain intact with no permanent damage under this 310 lbf impact load with a factor of safety more than 10. The physical integrity of the nonstructural Metamic™ insert under this load is maintained with a margin of safety more than 4. The factor of safety against fuel failure from this fuel-to-cell rattling force of 310 lbf is more than 80.

The analysis results demonstrated that the stress levels in the rack modules are well within the ASME Code, Section III, Subsection NF limits under the load combinations specified in NRC's OT Position Paper and the current licensing basis for TP3 and TP4.

3.2.4 Structural Evaluation of the Spent Fuel Pool Structure

In Section 7.0 of Attachment 9 to the LAR, the licensee summarized the structural integrity considerations for the TP3 and TP4 fuel pools whose structures are of similar design. The licensee stated that the pool structure was previously evaluated to assess the walls and the floor in support of license amendments No. 226 (Unit 3) and No. 222 (Unit 4) for addition of a rack in the Cask Area of the SFP. The existing pool structures were shown to have satisfactory design margins. These amendments were approved by the NRC on November 24, 2004.

The licensee argued that since the current LAR does not involve an expansion of storage capacity at either unit, essentially no new structural loadings are created. The licensee stated that the introduction of the Metamic™ inserts into the Region II racks will have a negligible effect on the existing pool structure because the additional weight of the inserts represents less than one-tenth of a percent of the gross weight on the pool slab. Also, since the bulk pool temperature is not affected by the addition of Metamic™ inserts, the thermal load, which represent a significant portion of the loading imposed on the structure, will not be changed. Therefore, a new structural evaluation of the SFPs was not warranted and, thus, not performed.

The licensee further substantiated that the governing factored load combinations for structural integrity evaluations of the SFP structure in the UFSAR involved the dead weight, thermal load, and the SSE load. The dead load consists of the combined weight of the pool water, the fuel racks, the reinforced concrete mass and the stored fuel. The pool water mass is slightly reduced as a result of inventory displaced by the added Metamic™ inserts. Adding inserts to the storage racks increases their mass by a small amount. Therefore, the dead weight remains essentially unchanged. A negligible change in overall mass of the pool structure implies that the dynamic characteristics remain essentially unchanged, and therefore, the seismic excitation load is essentially unchanged. Finally, since the LAR does not entail any change in the thermal-hydraulic parameters for the pool or the pool cooling system, the thermal gradient loads remain unchanged.

Based on the above discussion, the licensee concluded that the design basis of the SFP structure remains unaltered and valid, and the existing structural safety margins remain applicable after Metamic™ inserts are installed in the fuel storage racks. The NRC staff concurs with the licensee's conclusion and finds the current licensing basis for the SFP structure remains valid with the addition of Metamic™ inserts.

The use of Metamic™ inserts in the racks resulted in a small increase in weight of approximately one-tenth of a percent on the floor of the SFP structure. Since this weight increase is negligibly small, the design basis loads and load combinations on the spent pool structure remain unaltered, and the existing structural margins of safety remain applicable after Metamic™ inserts are installed in the fuel storage racks. The NRC staff finds the current licensing basis for the SFP structure remains valid with the addition of Metamic™ inserts.

3.3 <u>Boron Dilution</u>

There are two effects that the proposed amendments may have on the postulated boron dilution event:

1) the Metamic™ rack insert will displace a small amount of borated water in the SFP, potentially reducing the response time to a given dilution event, and

2) the criticality analysis of the new configuration (no Boraflex credit) could require a higher soluble boron credit than the current configuration (with Boraflex credit) to achieve design basis subcriticality requirements.

Each of the Unit 3 and Unit 4 SFPs are licensed for 1535 fuel assembly storage locations, arranged in 12 freestanding racks, and one cask area rack. The licensee has evaluated the impact of the inserted racks on boron dilution and found, using a conservative value of 614 inserts added to the racks, that approximately 600 gallons of water are displaced. When this incremental water volume is added to the cask area rack and the licensed limit of fuel assemblies, the total displaced volume of water is still less than the volume assumed in the analysis of record. Therefore, the existing boron dilution calculation remains bounding when considering the displacement of water by the Metamic™ inserts.

The current minimum soluble boron concentration required by TS 5.5.1.1.b for safe subcritical storage of fuel assemblies in the existing spent fuel storage racks is 650 parts per million (ppm). The licensee calculated the minimum soluble boron concentration required for the proposed storage configuration under the same conditions and determined it to be 560 ppm. Because the water volume is not significantly changed, and the time required to dilute the pool to the current minium concentration of 650 ppm is shorter than the time required to dilute it to the calculated minimum value of 560 ppm, the staff finds that the existing boron dilution analysis continues to remain conservative and bounding.

In TS Section 3/4.9.1 the licensee has proposed to delete SR 4.9.1.3, which requires that the spent fuel pit boron concentration be determined at least once per 31 days. SR 4.9.14 states, “The boron concentration of the Spent Fuel Pit shall be verified to be 1950 ppm or greater at least once per month.” The NRC staff finds that the requirement in SR 4.9.1.3 is accomplished by TS 4.9.14, therefore TS 4.9.1.3 can be deleted.

3.4 Thermal-Hydraulic Evaluation

With respect to thermal-hydraulic performance of the SFP cooling function, the licensee states that the net effect of the proposed changes are:

1) A very small decrease in the bulk SFP water inventory caused by the combined displacement of all the Metamic™ inserts, which if significant would result in an increase in SFP heatup rates and the reduction in the time to boil for any given loss of cooling event.

2) A small increase in local hydraulic resistance that will occur in those racks containing Metamic™ inserts, which will cause a slight increase in local temperature for any given assembly heat load.

The licensee evaluated the effect the Metamic™ inserts would have on:

i. The licensing basis evaluation of the maximum SFP bulk temperature for the various offload scenarios, to demonstrate temperature limits are not exceeded.

ii. The evaluation of loss-of-forced cooling scenarios, to establish the time to boil, the minimum time available to perform corrective actions, and the associated makeup water flow requirements.

iii. Determination of the maximum local water temperature under any operating condition with forced-flow cooling available, to establish that localized boiling in the fuel storage racks is not possible.

iv. The evaluation of the potential for departure from nucleate boiling (DNB) under any operating conditions, to establish that DNB is not possible.

The licensee concluded that for the cases involving the calculation of SFP bulk water temperatures for various offload scenarios, as well as for the cases in which loss of forced cooling and the associated time to boil was examined, the current design basis analysis contained sufficient conservatism in terms of pool volume to account for water displaced by Metamic™ inserts. Therefore, the analysis continues to provide conservative results for the cases analyzed for cases i and ii above, the SFP temperature will continue to remain within the SFP temperature limit, and time to boil and boil-off rates associated boil-off rates that could result from a loss of forced cooling continue to be bounded by those given in the plant's UFSAR.

In order to evaluate the maximum SFP local water temperature, the licensee used a rigorous Computational Fluid Dynamics (CFD) analysis. Two regions were modeled, 1) the SFP bulk region, and 2) the fuel storage racks containing the heat-generating fuel assemblies. The CFD analysis was performed with the FLUENT CDF, which was benchmarked under the Holtec QA program.

The licensee performed local water temperature calculations, based on an SFP with a total decay heat generation rate equal to the decay heat load coincident with the maximum SFP bulk temperature. The maximum local water temperature was calculated to be 206 °F, which is lower than the 241 °F local boiling temperature at the top of the active fuel region. Therefore, boiling will not occur in the racks while forced-flow cooling is available. Furthermore, it was determined that the cladding heat flux would be insufficient to result in DNB under any condition (i.e., forced-flow cooling, or bulk boiling).

This analysis demonstrates that the conservatively computed peak local water temperature with partial cell blockage and slight fuel assembly variations is 206 °F, and, thereby, is bounded by the boiling temperature of 241 °F at the top of the active fuel length. Thus, boiling will not occur in the racks while forced-flow cooling is available. The second addresses the potential for DNB. DNB requires the presence of two conditions, a heated surface temperature above the local saturation temperature of the adjacent water and a sufficient heat flux to prevent re-wetting of the heated surface as vapor is produced. The critical heat flux at which water begins the transition from nucleate boiling to DNB is about 106 W/m2. If the maximum heat flux is less than the critical heat flux, DNB cannot occur regardless of the fuel-cladding surface temperature and the local water temperature. The computed peak cladding heat flux is 3177 W/m2, which is significantly less than the critical heat flux. Thus, the cladding heat flux is insufficient to result in DNB under any condition, such as forced-flow or bulk boiling.

Based on the evaluation results described above, the NRC staff concludes that the maximum SFP bulk water temperature, and the minimum time to boil, will continue to be bounded by the existing plant licensing basis. In addition the impact of the changes proposed in this amendment on the local water temperature or potential is that DNB shows that the maximum local water temperature will remain well below boiling while forced-flow is available, and that the cladding heat flux would be insufficient to result in DNB. Therefore, nucleate boiling will not occur. The NRC staff finds this acceptable.

The NRC staff concludes, based on the considerations discussed above, that the thermal-hydraulic considerations, light-load handling, and boron-dilution aspects of the proposed LAR are acceptable. The NRC staff also finds the licensee's propose deletion of surveillance requirement 4.9.1.3 acceptable since TS 4.9.14 will continue to ensure that boron concentration measurements are taken on a monthly basis.

3.5 Metamic™ Surveillance Program

Metamic™, a cermat, is composed primarily of B4C (boron carbide) and aluminum Al 6061. B4C is the main constituent in materials known to perform effectively as neutron absorbers and Al 6061 is a marine-qualified material known for its resistance to corrosion. However, Metamic™ has not been previously used in SFP applications.

The licensee has provided a Metamic™ surveillance program that consists primarily of monitoring the physical properties of the absorber material and performing periodic neutron attenuation testing to confirm the physical properties.

3.5.1 Program Description

The purpose of the licensee's Metamic™ surveillance program is to ensure the physical and chemical properties of Metamic™ behave in a similar manner as that found in the Metamic™ qualification data. The surveillance program will monitor how the Metamic™ absorber material properties change over time under the radiation, chemical, and thermal environment found in the SFPs.

The surveillance program will be incorporated into Section 16.2 of the UFSAR, which will be prepared as part of the licensee's plant change modification package.

The licensee indicated that the TP3 and TP4 SFPs are identical with virtually identical cooling, rack design, and support systems. In addition, the two units have identical fuel types and their burnup limits are controlled by a single set of TS, which are supported by a single set of analyses. Given that the two SFPs are maintained in an identical manner to equivalent limits, the licensee will perform the Metamic™ surveillance program in a "lead unit." The "lead unit" will be the unit that will have Metamic™ inserts first placed in its SFP.

The licensee will install a coupon tree that holds 10 coupons in the SFP of the "lead unit." The coupons are identical in composition and manufacturing process as the Metamic™ inserts given that they will be made from the excess material removed while sizing the panels. The coupon tree will be placed in the SFP at a location that will ensure a representative dose to the coupons. In addition, this location will accurately simulate the flow characteristics, pool chemistry, and differential metal interfaces that the Metamic™ inserts will experience. The coupons will contain a B4C content between 22.5 percent and 31 percent, which is consistent with the B4C content in the Metamic™ used in the new spent fuel racks. The licensee does not plan to return removed coupons back to the coupon tree following testing due to decontamination, drying, and attenuation testing which may affect its ability to represent the installed Metamic™ inserts.

3.5.2 Monitoring Changes in the Physical Properties of Inserts and Testing of Coupons

The licensee states that the following examinations to assess the physical properties of the Metamic™ inserts will be performed on inserts from the "lead unit":

1. Camera aided visual examinations will be performed on five inserts at 4, 8, 12, 20, and 30 years to observe for visual indications such as bubbling, blistering, corrosion pitting, cracking, or flaking.

2. Dimensional measurements of length, width, and thickness will be performed on two inserts at 4, 12, 20, and 30 years.

3. Weight measurements will be performed on two inserts at 4, 12, 20, and 30 years.

In order to confirm the validity of the correlation between the physical characteristics of the Metamic™ inserts and their neutron absorption capabilities, the licensee will perform confirmatory neutron attenuation testing on two coupons from the “lead unit” at 4, 12, 20, and 30 years.

The licensee’s acceptance criteria for each examination are as follows:

1. Camera Aided Visual Examinations:
   a. Evidence of visual indications not limited to those listed in 3.1.2.1.

2. Dimensional Measurements:
   a. Length: Any change of + / - 1.0 inch
   b. Width: Any change of + / - 0.5 inch
   c. Thickness: Any change of + 0.010 inch / - 0.004 inch

3. Weight Measurements:
   a. Any change of + / - 10-percent

4. Neutron Attenuation Testing:
   a. A significant decrease in areal density. The licensee clarified in a letter dated July 17, 2007, that “significant” means “any unexpected decrease in areal density from the as-fabricated condition outside the statistical inaccuracies of the testing methodology.”

To establish a baseline for comparison, the licensee stated that for the areal density for each Metamic™ coupon taken from the panel material, it will use the fabrication features, qualification, and acceptance testing values for the Boron-10 areal density provided by the manufacturer. The manufacturer provides a guaranteed minimum value or a given value with confidence range. The licensee will review the fabrication qualification and acceptance test data to determine whether the value provided is acceptable for pre-characterization. If this value is determined to be acceptable, it will be used as the acceptance criterion for neutron attenuation testing. If this value is determined not to be acceptable, the licensee may decide to perform neutron attenuation testing of a coupon prior to installation in the SFP to establish a baseline acceptance criterion. The baseline for comparison of the inserts for visual and physical measurements will be based on the specifications provided by the manufacturer.

When an insert is removed, measurements and physical observations will be recorded and evaluated for any physical or visual change when compared to the baseline data. If the measurements taken do not meet the established acceptance criteria, the licensee will expand its inspection in the “lead unit.” The visual inspection will be doubled from 5 inserts to 10 inserts and the physical measurements will be doubled from 2 inserts to 4 inserts. Once a condition is confirmed, the condition would be assumed to be present in the “lead unit” and the “non-lead unit,” and the condition would be entered into the licensee’s Corrective Action (CA) Program. If the condition is determined to be “unique” to the “lead unit,” surveillance will be performed in the "non-lead unit" to confirm that the condition is "unique" to the "lead unit." However, if the condition is determined to be present in both units, the licensee's CA Program will determine how the condition is mitigated in both units.

Based on its review of the licensee's Metamic™ surveillance program, the NRC staff concludes that the materials in the TP3 and TP4 spent fuel racks, including the Metamic™ neutron absorber, are compatible with the environment of the SFPs. Also, the NRC staff finds the proposed surveillance program, which includes visual, physical and confirmatory tests, is capable of detecting potential degradation of the Metamic™ material that could impair its neutron absorption capability. Therefore, the NRC staff concludes that the use of Metamic™ as a neutron absorber panel in the new spent fuel racks is acceptable.

3.5.3 Criticality Safety Analyses

Criticality analyses demonstrate that the proposed new loading patterns in the current SFP storage racks, including credit for Metamic™ inserts, fuel assembly inserts and vacant cells will continue to meet the same subcriticality as that required of the current SFP.

3.5.4 Loading Patterns / Storage Arrays

The licensee states that the fuel-loading patterns and loading rules are supported by new criticality analyses. The new analyses define the loading patterns in the following terms:

a) 2 X 2 storage arrays,

b) fuel categories (based on enrichment, burnup, and post-irradiation cooling time)

c) rules for combining the 2 X 2 arrays and fuel categories to create acceptable loading patterns.

Each 2 X 2 array is explicitly defined for the fuel category that has the maximum allowable reactivity for that array. Nine different 2 X 2 arrays were analyzed and are defined in the TS. The analyses confirmed the acceptability of each array-fuel category combination and determined what limitations should be placed on the use of each array. Each 2 X 2 array was analyzed with fuel of maximum allowable reactivity such that fuel of a lower reactivity may also be placed in the array without penalty. The maximum calculated values of the neutron multiplication factor include appropriate bias effects, a margin for uncertainty in the reactivity calculations, the effect of manufacturing tolerances on the reactivity, and are calculated with a 95 percent probability at a 95 percent confidence level as described in the Kopp letter. In addition, reactivity effects of gaps and interfaces between racks were evaluated, to assure that under all credible conditions, the fuel pool keff will not exceed the regulatory limits of $\leq$ 0.95 in borated water and < 1.0 in unborated water.

3.5.5 Criticality Analysis

The analyses follow the format documented in the Kopp letter. The calculations are used to determine acceptable storage criteria for both Region I and Region II style racks, in addition to the analyses of possible abnormal and accident conditions. The primary code used in the criticality calculations was MCNP4a. The code CASMO-4 was used to determine the reactivity effect of tolerances and to perform depletion calculations. All calculations are made using an explicit model of the fuel and storage cell geometry. MCNP three-dimensional calculations model a 2 X 2 array of cells surrounded by periodic boundary conditions. In CASMO, only a single cell is modeled. Since CASMO-4 is a two-dimensional code, the fuel assembly hardware above and below the active fuel length is not represented. The three-dimensional MCNP models that include axial leakage assume 30 cm of water above and below the active fuel length. Additional models with more than four cells and different boundary conditions were investigated to quantify the effects of interfaces between racks and to analyze accident conditions.

These computer codes are used to develop burnup vs. enrichment and cooling time curves that are unique to a total of 10 storage configurations. These curves are fits to a second order polynomial of maximum required assembly average burnup as a function of initial U-235 enrichment and cooling time. These curves define the decision rule for acceptance or rejection of an assembly for storage in each of the 10 storage configurations. Analyses demonstrate that the effective neutron multiplication factor (keff) of all permissible fuel storage arrangements is less than or equal to 0.95 when the storage racks are assumed to be fully loaded with fuel of the highest permissible reactivity, and the pool is assumed to be flooded with borated water at a temperature within the normal operating range corresponding to the highest reactivity. In addition, the analyses demonstrate that keff of each fuel storage arrangement remains less than 1.0 when the fuel pool is assumed to be flooded with unborated water. The maximum calculated values of the neutron multiplication factor include appropriate bias effects margin for uncertainty in reactivity calculations, the effect of manufacturing tolerances on reactivity, and are calculated with 95 percent probability at a 95 percent confidence level.

A minimum soluble boron concentration of 560 ppm must be maintained in the SFP to ensure that keff is less than or equal to 0.95 under all normal conditions. Analyses of the reactivity effects due to accident conditions show that the most limiting accident condition results from placing a fresh fuel assembly, enriched to 4.5 wt% U-235, into the water-filled cell in an array of three fuel assemblies and one water-filled cell in every four cells of a Region 2 rack. A minimum soluble boron concentration of 1462 ppm must be maintained in the SFP to ensure that keff is less than or equal to 0.95 in this limiting case. TP3 and TP4 TS require that the fuel pool soluble boron concentration be maintained at ≥ 1950 ppm at all times, and, thereby, the acceptance criteria are met.

4.0 REGULATORY COMMITMENTS

The following table identifies those actions committed to by FPL in conjunction with this amendment request as specified in Attachment 7 of the January 27, 2006, letter:

Regulatory Commitments	**Scheduled Completion Date**
Revise existing processes and databases for administratively controlling and independently verifying the classification and placement of fuel assemblies in the SFP storage racks; (excluding the Cask Area Rack) to incorporate the new restrictions of this amendment.	Prior to amendment implementation
Metamic™ insert boron carbide content shall be limited to a maximum 31 weight percent boron carbide	Perpetual commitment documented in UFSAR

5.0 STATE CONSULTATION

Based upon a letter dated May 2, 2003, from Michael N. Stephens of the Florida Department of Health, Bureau of Radiation Control, to Brenda L. Mozafari, Senior Project Manager, U.S. Nuclear Regulatory Commission, the State of Florida does not desire notification of issuance of license amendments.

6.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change the surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (71 FR 26999). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: J. Ma
G. Thomas
L. Miller
A. Stubbs
Y. Orechwa
B. Mozafari

Date: July 17, 2007

cc:
Mr. William E. Webster
Vice President, Nuclear Operations,
South Region
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

M. S. Ross, Managing Attorney
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

Marjan Mashhadi, Senior Attorney
Florida Power & Light Company
801 Pennsylvania Avenue, NW.
Suite 220
Washington, DC 20004

William Jefferson, Jr.
Site Vice President
Turkey Point Nuclear Plant
Florida Power and Light Company
9760 SW. 344th Street
Florida City, FL 33035

County Manager
Miami-Dade County
111 Northwest 1 Street, 29th Floor
Miami, Florida 33128

Senior Resident Inspector
Turkey Point Nuclear Plant
U.S. Nuclear Regulatory Commission
9762 SW. 344th Street
Florida City, Florida 33035

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

Mr. Craig Fugate, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304

Michael O. Pearce
Plant General Manager
Turkey Point Nuclear Plant
Florida Power and Light Company
9760 SW. 344th Street
Florida City, FL 33035

James Connolly, Licensing Manager
Florida Power and Light Company
Turkey Point Nuclear Plant
9760 SW. 344th Street
Florida City, FL 33035

Don E. Grissette
Vice President, Nuclear Training and
Performance Improvement
Florida Power and Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

Mr. Rajiv S. Kundalkar
Vice President, Nuclear Technical Services
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420