March 4, 2003

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 UNITS 3 AND 4 - ISSUANCE OF AMENDMENTS REGARDING REDUCTION IN DECAY TIME FROM 100 TO 72 HOURS (TAC NOS. MB6549 AND MB6550)

Dear Mr. Stall:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 223 to Facility Operating License No. DPR-31 and Amendment No. 218 to Facility Operating License No. DPR-41 for the Turkey Point Plant, Units Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application dated October 21, 2002, as supplemented by letters dated February 11, 2003, and March 3, 2003.

These amendments will reduce the minimum time required for reactor subcriticality prior to removing irradiated fuel from the reactor vessel from 100 hours to 72 hours as specified in Technical Specification 3/4.9.3 “Refueling Operations, Decay Time.”

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/

Eva A. Brown, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosures:
1. Amendment No. 223 to DPR-31
2. Amendment No. 218 to DPR-41
3. Safety Evaluation

cc w/enclosures: See next page

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FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 223
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 October 21, 2002, as supplemented by letters dated February 11, 2003 and March 3, 2003, 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 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. 223, 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 within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/
Allen G. Howe, Chief, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 4, 2003

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 218
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 October 21, 2002, as supplemented by letters dated February 11, 2003 and March 3, 2003, 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 Facility Operating License No. DPR-41 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. 218, 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.

(C) This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Allen G. Howe, Chief, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 4, 2003

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 223 FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 218 FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

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

Remove pages	Insert pages
3/4 9-3	3/4 9-3
B 3/4 9-1	B 3/4 9-1

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 223 TO FACILITY OPERATING LICENSE NO. DPR-31

AND AMENDMENT NO. 218 TO 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 dated October 21, 2002, as supplemented by letters dated February 11, 2003, and March 3, 2003, Florida Power and Light Company (FPL, the licensee), requested an amendment that would reduce the Technical Specification (TS) 3/4.9.3 decay time for core offload to 72 hours from 100 hours.

The licensee submitted this license amendment as a revision to the selectively implemented alternative source term (AST), as described in Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," pursuant to Title 10, *Code of Federal Regulations* (10 CFR) Section 50.67, "Accident Source Term."

In September 2001, the staff approved License Amendments 216 and 210 for Turkey Point (TP) Units 3 and 4, respectively. These license amendments revised TS 3.9.4, "Containment Building Penetrations," to allow the containment hatch to be open under administrative controls during core alterations and movement of non-recently irradiated fuel assemblies using a selective implementation of the AST. In these license amendments, the licensee requested, and the staff approved, a decay time of 100 hours.

All other assumptions and parameters used for the postulated fuel-handling accident (FHA) remain the same as those used in License Amendments 216 and 210, except the control room unfiltered air inleakage rate is conservatively increased to 1000 cubic feet per minute (cfm) from 500 cfm, which is a current design basis.

Delaying movement of recently irradiated fuel allows time for radioactive decay of the fission product inventory in the fuel, and thereby reduces the amount of decay heat that must be removed by the spent fuel pool (SFP) cooling system. A reduction in decay time can lead to increases in peak temperatures of the SFP water and the SFP concrete structure, due to a relatively higher level of decay heat generation in the most recent batch of offloaded fuel. A reduction in decay time can also affect the time-to-boil analysis and calculated dose consequences resulting from a postulated design-basis FHA as described in the licensee's Updated Final Safety Analysis Report (UFSAR) FHA safety analysis.

The licensee's supplementary submittals dated February 11, 2003 and March 3, 2003, did not affect the original proposed no significant hazards determination, or expand the scope of the request as noticed in the *Federal Register* on November 12, 2002 (67 FR 68738).

2.0 REGULATORY EVALUATION

Appendix A of 10 CFR Part 50, General Design Criterion (GDC) 44, "Cooling Water," requires a system to transfer heat from structures, systems, and components important to safety, to an ultimate heat sink. Guidelines to meet this criterion are located in Section 9.1.3, "Spent Fuel Pool Cooling and Clean-up Systems," of NUREG-0800, "Standard Review Plan for Review of Safety Analysis reports for Nuclear Power Plants." In meeting this criterion, the licensee should demonstrate that sufficient spent fuel pool 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.

Section 50.67 of 10 CFR "Accident Source Term," allows licenses issued prior to January 10, 1997 to voluntarily revise the current accident source term used in design basis radiological consequence analyses for a license amendment under 10 CFR Part 50.90. The current radiological consequence analysis for the postulated FHA for Turkey Point Units 3 and 4 is based on a selective implementation of the AST, as described in Regulatory Guide (RG)1.183 pursuant to 10 CFR 50.67. In this license amendment request, the licensee proposed a revision to the selectively implemented AST. The Commission approved the use of the AST at operating reactors in a Staff Requirement Memorandum (SRM) dated December 8, 1999, stating that, "This action would allow interested licensees to pursue cost-benefit licensing action to reduce unnecessary regulatory burden without compromising the safety of facility. Many of the alternative source term applications may provide concurrent improvements in overall safety and in reduced occupational exposures." In a separate SRM dated September 4, 1998, the Commission directed the staff to allow limited or selective application of the alternative source term at operating reactors.

As part of the implementation of the AST, the total effective dose equivalent (TEDE) acceptance criteria of Chapter 15.0.1 of Standard Review Plan (SRP) for the postulated FHA replaces the previous whole body and thyroid dose guidelines of SRP Section 15.7.4 as follows:

	SRP 15.0.1 GDC 19	SRP 15.7.4 GDC 19
Exclusion Area Boundary Low Population Zone	6.3 rem TEDE	75 rem thyroid and 6 rem Whole body
Control Room	5 rem TEDE	5 rem whole body, or its equivalent to any part of the body

3.0 TECHNICAL EVALUATION

3.1 Reduction in Minimum Decay Time Prior to Moving Fuel in the Reactor Vessel

As discussed in Section 1.0, reducing the required decay time will increase the short-term decay heat load in the SFP. The licensee evaluated the impact of the proposed amendment on the SFP cooling system. To meet GDC 44, the licensee must demonstrate that the bulk water temperature in the SFP will remain below the design bulk SFP water temperature for planned offloads, the bulk water temperature will remain below the boiling (212 degrees Fahrenheit [°F]) for unplanned offloads, the time to heat up the bulk water to boiling will provide sufficient time to establish an alternate means of cooling, and the makeup rate exceeds the rate of water loss due to boil-off.

3.1.1 Spent Fuel Pool Cooling System

There are two SFPs at TP, one for each unit. Each storage pool has a dedicated cooling system. Each system consists of one 100-percent capacity pump, heat exchanger, filter, demineralizer, piping and associated vales and instrumentation. The heat exchanger is cooled by the component cooling water system. A 100-percent capacity spare pump is also permanently piped into the SFP cooling system. Both pumps are powered from the same breaker via a transfer switch. As such, the spare pump can operate in place of the main pump, but not in parallel with it. The spare pump maintains the system's functional capability assuming a single active failure of the SFP pump. Additionally, an emergency spare, with a lower flow capacity, can be aligned to provide cooling. In the February 11, 2003, submittal, the licensee states that the target unavailability of the SFP cooling system is 2-percent. Historically, the unavailability rate has been less than 2-percent. The licensee identified the SFP cooling pumps as required equipment, during each Unit's refueling outage, and does not schedule maintenance during that period. Additionally, each unit has emergency pumps that can provide auxiliary means of SFP cooling at a reduced flow rate. These pumps are powered separately from the main cooling pumps. The emergency pumps are similarly identified as key components under 10 CFR 50.64, the Maintenance Rule.

TP Units 3 and 4 currently have administrative controls to ensure the bulk SFP water temperature is maintained below 150 °F. In the submittal, the licensee states it will retain the commitment to maintain and implement administrative controls to ensure SFP bulk water temperature does not exceed 150 °F during a planned refueling. In the February 11, 2003, submittal, the licensee states that if conditions during fuel offload result in SFP temperatures reaching an administrative limit, the core offload will be suspended. Fuel offload will not resume until the cause for the performance discrepancy is understood, evaluated, and corrected.

3.1.2 Spent Fuel Pool Heat-up Analyses

For TP Units 3 and 4, the bulk water temperature in the SFP must remain below the design temperature of 150 °F from a full core offload during a planned refueling and below 212 °F during an unplanned offload. The current heat-up analysis in the TP UFSAR Appendix 14D, Section 3.2 was prepared for the installation of high density storage racks. The analysis reflects full core offload practices, 18-month refueling cycles, and moving fuel as early as 108 hours after reactor shutdown. The analysis used bounding values including the component

cooling water system (CCW) inlet water temperature of 105 °F and a maximum heat generation assuming all SFP rack spaces are filled. The licensee performed bounding calculations to demonstrate that the bulk SFP temperature would remain below the design temperature of the pool of 150 °F.

In the submittal, for planned offloads, the licensee analyzed a typical offload scenario. The licensee analyzed a full core offload 72 hours after shutdown, with a CCW inlet temperature of 85 °F and a transfer rate of eight fuel assemblies per hour. The licensee determined the bulk SFP water temperature would be 147 °F. However, using 72 hour decay time and all bounding values, the bulk SFP water temperature would exceed the design temperature. As such, the licensee proposes to use a calculation methodology that will allow them to modify several input parameters using actual values at the time of fuel offload to ensure that the bulk SFP water temperature will remain below the design temperature.

The licensee states that the calculation methodology is the same methodology used in the bounding calculations currently in the UFSAR. Using a calculation methodology rather than bounding calculations will allow the licensee to vary the actual offload start time (not to be earlier than 72 hours), average offload rate, and actual cooling water average temperature. The licensee could also use the actual heat load in the SFP, rather than assuming the heat load from a full SFP. In the February 11, 2003, submittal, the licensee submitted a sample calculation to demonstrate the methodology. The licensee uses the ORIGEN-2 computer code to calculate decay heat generated by previously discharged fuel assemblies. The licensee provided a benchmark case for the methodology. It demonstrates that the methodology provides bounding results even when non-bounding values for CCW temperature and offload rates are used. The results show that the methodology overpredicted peak temperature by approximately 3 °F. In a planned outage, the licensee states that values for the offload rate and CCW temperature would be chosen as representative but still bounding of the actual conditions. In the February 11, 2003, submittal, the licensee states that fuel offload under normal conditions will be initiated only when the initial conditions project a maximum SFP temperature of less than 150 °F.

For unplanned offloads, the SFP cooling capacity must be sufficient to maintain the bulk SFP water temperature below boiling. For TP Units 3 and 4, the decay heat load is based on a full core offload beginning at 72 hours plus a refueling load (1/3 core) that has decayed for 36 days with all other storage locations filled including the cask loading area. The licensee conservatively assumed an instantaneous offload of the entire core at 72 hours. An assumption of a single failure is not required, therefore, the SFP cooling system is operational. Under these conditions the licensee determined the maximum bulk SFP water temperature is 183 °F with a CCW temperature of 105 °F. This maximum steady-state temperature is reached 25 hours after offload.

Based on the above review, the staff finds the assumption of a decay time of 72 hours has been incorporated into the analysis with acceptable results. The calculation methodology is acceptable in predicting the maximum bulk SFP temperature for planned offloads to maintain the bulk SFP temperature below the design temperature. The staff finds that the licensee has demonstrated the SFP cooling system has adequate capability during unplanned offload conditions. The staff concludes the SFP cooling capacity is acceptable for planned and unplanned offload conditions, using a calculation methodology and bounding calculations, respectively.

3.1.3 Time-to-Boil and Make-up Water

The highest evaporation rate from the SFP occurs at boiling if all SFP cooling is lost after an unplanned refueling offload. The licensee re-analyzed the time-to-boil using representative refueling practices. Assuming SFP cooling is lost at the time of peak pool temperature (183 °F), the time to boil is 1.5 hours. The maximum boil-off rate for this condition is 81 gallons per minute (gpm). A make-up rate of 100 gpm is the TP Units 3 and 4 acceptance criteria for the SFP bulk heat-up analysis. The licensee states that 1.5 hours provides sufficient time to establish make-up to the SFP. In the February 11, 2003, submittal, the licensee states that as part of the implementation of this amendment, at least two make-up water sources of adequate capacity will be required to be available by procedure during refueling outages.

Several sources of make-up water with sufficient flow rates are available including the following:

Make-up Water Source	Flow Rate
Demineralized Water System	174 gpm
Primary Water System - Direct connection	415 gpm
Primary Water System - Local hose station	500 gpm
Fire Hose Station (Outside SFP)	100 gpm
Refueling Water Storage Tank (Borated water)	100 gpm

Based on the above, the staff finds the time-to-boil analysis acceptable and that the SFP cooling systems for TP Units 3 and 4 have sufficient make-up water sources.

3.1.4 Spent Fuel Pool Local Thermal Hydraulic Analysis

The thermal hydraulic analysis demonstrates that the SFP water remains subcooled at all areas in the pool. As a result, the area of most concern is in the spent fuel storage racks. The licensee performed the current thermal hydraulic analysis to support the addition of high density spent fuel racks, which is described in UFSAR Appendix 14D, Section 3.3. A new analysis was performed by the licensee to determine if the water in the storage racks would remain subcooled given the increase in decay heat from the 72 hours offload condition. The licensee used the FLUENT program, a computational fluid dynamics analysis, to evaluate a bounding case that included that highest bulk SFP temperature of 150 °F and decay heat load. The resultant calculated peak local water temperature was 192 °F and the peak fuel clad temperature was 236 °F. The licensee states that the minimum water depth at the top of the active fuel is 25.75 feet. At this water depth, the saturation temperature of water is 241 °F. Therefore, the local water temperature and peak clad temperature remain below the saturation temperature.

Based on the licensee's analysis that the SFP water will remain subcooled, the staff finds that the effects of the reduced decay time on the local spent fuel pool water temperature are acceptable.

3.1.5 Structural Integrity of the Spent Fuel Pool

The licensee states that the structural analysis for the SFP does not require a change, and that the maximum bulk SFP water temperature remains below 150 °F. The American Concrete

Institute (ACI) 349 Code limits the concrete temperature to (1) 150 °F for normal operation or any other long-term period, 200 °F for local areas, (2) 350 °F for accident or any other short-term period, and (3) 650 °F from steam or water jets in the event of a pipe failure.

Because the current licensing basis for the SFP structural analysis accommodates the increased heat generation load, the NRC staff finds the effects of the reduced decay time on the structural integrity acceptable.

3.2 Radiological Consequences

3.2.1 Fuel Handling Accident

As stated in Section 1.0 above, all assumptions and parameters used for the postulated FHA remain the same as those used in License Amendments 216 and 210 issued on September 21, 2001, for TP Units 3 and 4, respectively except the following:

1. The minimum time required for reactor subcriticality prior to removing irradiated fuel from the reactor vessel is reduced to 72 hours from 100 hours, and

2. control room unfiltered air inleakage rate is conservatively increased to 1000 cfm from 500 cfm which is a current licensing basis.

Certain parts of the following technical evaluation are reproduced from that presented in license amendments 216 and 210.

The current radiological consequence analysis for the postulated design basis FHA is based on the selective implementation of the AST. In this license amendment request, the licensee re-evaluated the radiological consequences of a postulated FHA using a 72-hour decay time and 1000 cfm unfiltered air inleakage rate into the control room and concluded that the release of fission products will still result in doses that are within the acceptable dose criteria specified in 10 CFR 50.67 for control room and the dose acceptance criterion specified in the SRP 15.0.1 for the exclusion area boundary (EAB).

The licensee reached this conclusion, based on the following:

1. Assuming that one whole fuel assembly with the highest radial peaking factor of 1.7 is damaged releasing its entire fission products in the fuel gap into the spent fuel pool and reactor cavity water,

2. using a fission product decay period of 72 hours (time period from the reactor shutdown to the first fuel movement),

3. using an overall effective decontamination factor of 200 for the iodine isotopes in the spent fuel pool and reactor cavity with minimum water depth of 23 feet,

4. using the guidance provided in RG 1.183, for fission product inventory, and fractions in fuel rod gap and the iodine species in airborne release from the containment,

5. using the bounding fission product inventory in fuel assemblies with respect to fuel enrichments and burnups.

The licensee calculated the bounding values for fission product inventory in fuel gap with ORIGEN-2 computer code developed by the Oak Ridge National Laboratory and described in "ORIGEN 2.1 - Isotope Generation and Depletion Code - Matrix Exponential Method," dated August 1991. The licensee used the highest bounding values of fission product nuclides inventory (noble gases, iodine, and alkali metals) in the radiological consequence dose calculations for the postulated FHA. In selection of the highest bounding values, the licensee considered the following four fuel management cases at TP:

1. Core-average assembly with 3.0 percent U-235 and 40 gigawatt days per metric ton of uranium (MWD/MTU)

2. Core-average assembly with 4.5 percent U-235 and 40 GWD/MTU

3. Peak-power assembly with 3.0 percent U-235 and 62 GWD/MTU

4. Peak-power assembly with 4.5 percent U-235 and 62 GWD/MTU

The staff finds that the licensee's bounding fission product inventory values selected and used by the licensee for the postulated FHA are acceptable.

3.2.2 Control Room Habitability

For the control room habitability assessment, the licensee assumed, without verification, an unfiltered control room air inleakage rate of 1000 standard cubic feet per minute (scfm). The staff's confirmatory assessment indicates that the control room operator dose will still be within the dose acceptance criterion specified in 10 CFR 50.67 without isolating the control room with no iodine removal by charcoal adsorbers in the control room ventilation system (see Table 1, Attachment). The proposed inleakage rate of 1000 cfm is more conservative than the current licensing basis of 500 cfm. Therefore, the staff finds the 1000 scfm unfiltered inleakage rate assumed by the licensee acceptable. The staff's acceptance of 1000 scfm unfiltered inleakage rate, however, is only limited to the design basis FHA.

For the atmospheric relative concentrations (χ/Q values) for the exclusion area boundary (EAB) and control room air intake, the licensee used the current design basis values in the Turkey Point UFSAR. For the control room χ/Q value for the shorter duration for the FHA (2 hours), the licensee extrapolated the 0 to 8 hour value in the UFSAR. The staff finds that the licensee's extrapolation of the UFSAR value to obtain more conservative χ/Q value for the 0 to 2 hour duration is acceptable.

The staff reviewed the licensee's analysis and finds that the major parameters and assumptions used for the radiological consequence analysis for the postulated FHA are consistent with those provided in the SRP Section 15.0.1, "Radiological Consequence Analyses Using Alternative Source Terms," and RG 1.183. Table 1 summarizes the results of the licensee's radiological consequence analyses for the EAB and control room. Table 2 lists the major assumptions and parameters used by the licensee in its radiological consequence calculations and by the staff in its confirmatory dose calculations.

The staff reviewed the licensee's analysis and performed a confirmatory assessment of the radiological consequences resulting from the postulated FHA. The doses calculated by the licensee and the staff are listed in Table 1. The major parameters and assumptions used by the licensee in its dose calculations and by the staff in its confirmatory dose calculations are listed in Table 2. The staff's analysis confirmed the licensee's conclusion that the radiological consequences would not exceed the dose criteria specified in 10 CFR 50.67 for control room and the dose acceptance criterion specified in the SRP 15.0.1 for the EAB and low population zone.

Based on the discussions above, the staff finds the reduction in the minimum decay time from 100 to 72 hours acceptable. Therefore, the modification of the decay limits in TS 3/4.9.3 from 100 to 72 hours is acceptable.

4.0 STATE CONSULTATION

Based upon a letter dated March 8, 1991, from Mary E. Clark of the State of Florida, Department of Health and Rehabilitative Services, to Deborah A. Miller, Licensing Assistant, U.S. Nuclear Regulatory Commission, the State of Florida does not desire notification of issuance of license amendments.

5.0 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 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 (67 FR 68738). 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.

6.0 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.

Attachment: Tables 1 and 2

Principal Contributors: Diane Jackson and Jay Lee, NRR

Date: March 4, 2003

TABLE 1

Radiological Consequences for Fuel Handling Accident (rem TEDE[1])

	Licensee	NRC	Acceptance Criteria
Exclusion area boundary	0.47	0.47	6.3[2]
Control room isolated as proposed	2.25	2.89	5.0[3]
Control room not isolated and no filtration [4]	N/A	3.99	5.0[3]

[1] Total effective dose equivalent
[2] From SRP 15.0.1
[3] From 10 CFR 50.67
[4] For sensitivity study

Attachment

Table 2
Parameters and Assumptions Used in
Radiological Consequence Calculations
Fuel Handling Accident

Parameter	Value
Radial peaking factor	1.7
Fission product decay period	72 hours
Number of fuel assembly	1
Fuel pool/reactor cavity water depth	23 ft
Fuel gap fission product inventory	
Noble gases excluding Kr-85	5 percent
Kr-85	10 percent
Iodine except I-131	5 percent
I-131	8 percent
Fuel pool decontamination factors	
Iodine	200
Noble gases	1
Control room	
Unfiltered infiltration	1000 scfm
Recirculation flow through charcoal adsorber	375 scfm
Makeup air flow	1025 scfm
Charcoal adsorber iodine removal efficiency	95 percent
Atmospheric relative concentrations (sec/m^3)	
Exclusion area boundary	
0 to 2 hours	1.54E-4
Control room	
0 to 1 hours	1.51E-3
1 to 8 hours	9.58E-4
8 to 24 hours	7.52E-4
1 to 4 days	5.26E-4
4 to 30 days	2.94E-4

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

TURKEY POINT PLANT

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