February 10, 1997

Mr. T. F. Plunkett
President, Nuclear Division
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: ST. LUCIE UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS REGARDING REFUELING TECHNICAL SPECIFICATION (TAC NOS. M97211 AND M97212)

Dear Mr. Plunkett:

The Commission has issued the enclosed Amendment Nos. 148 and 87 to Facility Operating License Nos. DPR-67 and NPF-16 for the St. Lucie Plant, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated October 30, 1996.

These amendments revise the St. Lucie Technical Specifications to remove inconsistencies between the definition of Core Alterations and the Applicability, Action and Surveillance requirements of two specifications relating to water level and containment isolation systems during refueling operations.

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,

Original signed by
Leonard A. Wiens, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-335
and 50-389

Enclosures:
1. Amendment No.148 to DPR-67
2. Amendment No.87 to NPF-16
3. Safety Evaluation

cc w/enclosures:
See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

FLORIDA POWER & LIGHT COMPANY

DOCKET NO. 50-335

ST. LUCIE PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 148
License No. DPR-67

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

   A. The application for amendment by Florida Power & Light Company, et al. (the licensee), dated October 30, 1996, 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, Facility Operating License No. DPR-67 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.(2) to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 148 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 10, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 148

TO FACILITY OPERATING LICENSE NO. DPR-67

DOCKET NO. 50-335

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

Remove Pages	Insert Pages
3/4 9-9	3/4 9-9
3/4 9-10	3/4 9-10

CONTAINMENT ISOLATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.9 The containment isolation system shall be OPERABLE.

APPLICABILITY: During CORE ALTERATIONS.
During movement of irradiated fuel assemblies within containment.

ACTION:

With the containment isolation system inoperable, close each of the penetrations providing direct access from the containment atmosphere to the outside atmosphere.

SURVEILLANCE REQUIREMENTS

4.9.9 The containment isolation system shall be demonstrated OPERABLE within 72 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS by verifying that containment isolation occurs on manual initiation and on a high radiation signal from two of the containment radiation monitoring instrumentation channels.

WATER LEVEL - REACTOR VESSEL

LIMITING CONDITION FOR OPERATION

3.9.10 At least 23 feet of water shall be maintained over the top of irradiated fuel assemblies seated within the reactor pressure vessel.

APPLICABILITY: During CORE ALTERATIONS.
During movement of irradiated fuel assemblies within containment.

ACTION:

With the requirements of the above specifications not satisfied, immediately suspend CORE ALTERATIONS and movement of irradiated fuel assemblies within containment, and immediately initiate action to restore refueling cavity water level to within limits.

SURVEILLANCE REQUIREMENTS

4.9.10 The water level shall be determined to be at least its minimum required depth within 2 hours prior to the start of and at least once per 24 hours thereafter during CORE ALTERATIONS and during movement of irradiated fuel assemblies within containment.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

FLORIDA POWER & LIGHT COMPANY

ORLANDO UTILITIES COMMISSION OF

THE CITY OF ORLANDO, FLORIDA

AND

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 50-389

ST. LUCIE PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 87
License No. NPF-16

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

   A. The application for amendment by Florida Power & Light Company, et al. (the licensee), dated October 30, 1996, 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, Facility Operating License No. NPF-16 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.2 to read as follows:

   2. Technical Specifications

      The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 87 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 10, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 87

TO FACILITY OPERATING LICENSE NO. NPF-16

DOCKET NO. 50-389

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

Remove Pages	Insert Pages
3/4 9-10	3/4 9-10
3/4 9-11	3/4 9-11

3/4.9.9 CONTAINMENT ISOLATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.9 The containment isolation system shall be OPERABLE.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within containment.

ACTION:

With the containment isolation system inoperable, close each of the containment penetrations providing direct access from the containment atmosphere to the outside atmosphere.

SURVEILLANCE REQUIREMENTS

4.9.9 The containment isolation system shall be demonstrated OPERABLE within 72 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS by verifying that containment isolation occurs on manual initiation and on a high radiation test signal from each of the containment radiation monitoring instrumentation channels.

3/4.9.10 WATER LEVEL - REACTOR VESSEL

LIMITING CONDITION FOR OPERATION

3.9.10 At least 23 feet of water shall be maintained over the top of the reactor pressure vessel flange.

APPLICABILITY: During CORE ALTERATIONS.
During movement of irradiated fuel assemblies within containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend CORE ALTERATIONS and movement of irradiated fuel assemblies within containment, and immediately initiate action to restore refueling cavity water level to within limits.

SURVEILLANCE REQUIREMENTS

4.9.10 The water level shall be determined to be at least its minimum required depth within 2 hours prior to the start of and at least once per 24 hours thereafter during CORE ALTERATIONS and during movement of irradiated fuel assemblies within containment.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 148 AND 87

TO FACILITY OPERATING LICENSE NO. DPR-67 AND NO. NPF-16

FLORIDA POWER AND LIGHT COMPANY, ET AL.

ST. LUCIE PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-335 AND 50-389

1.0 INTRODUCTION

By letter dated October 30, 1996, Florida Power and Light Company (FPL), et al., the licensee, submitted a request to amend the St.Lucie Plant, Units 1 and 2, Technical Specifications (TS). The requested amendments would make an editorial change to TS 3/4.9.9, "Refueling Operations, Containment Isolation System," and, for St. Lucie Unit 1, the Limiting Condition for Operation (LCO) is modified to conform with other related refueling requirements. The Applicability, Actions, and Surveillance Requirements of TS 3/4.9.10, "Refueling Operations, Water Level-Reactor Vessel," are upgraded consistent with the Standard Technical Specifications (STS) for Combustion Engineering Plants, NUREG-1432, for both St. Lucie Units. This latter revision is also intended to reduce the potential for personnel contaminations during refueling activities at Unit 2.

2.0 EVALUATION

a) TS 3/4.9.9 (Unit 1 only): The existing Applicability statement for TS 3/4.9.9 requires the Containment Isolation System to be OPERABLE at all times during MODE 6, which is not consistent with the operability requirements for those containment penetrations that the isolation system would operate. Pursuant to Specification 3/4.9.4, "Refueling Operations, Containment Penetrations," the ability to close containment penetrations is only required in MODE 6 when CORE ALTERATIONS or movement of irradiated fuel within containment is in progress. The proposed change would make the Applicability statement for TS 3/4.9.9 consistent with TS 3/4.9.4. This change will also make the Unit 1 TS 3/4.9.9 the same as the corresponding Specification for the Containment Isolation System at St. Lucie Unit 2, and is consistent with the STS LCO 3.9.3 for Containment Penetrations.

The containment serves to contain fission product radioactivity that may be released from the reactor core following an accident, such that offsite radiation exposures are maintained well within the requirements of 10 CFR Part 100. The most severe radiological consequences result from a fuel

handling accident. Fuel handling accidents include dropping a single irradiated fuel assembly or dropping a heavy object onto other irradiated fuel assemblies. In Mode 6, when core alterations or movement of irradiated fuel assemblies within containment are not being conducted, a fuel handling accident is highly improbable. Under these conditions, no requirements are necessary for the Containment Isolation System. Therefore, the proposed change to the Applicability statement of TS 3/4.9.9 is acceptable.

b) TS 3/4.9.10: The existing TS requires at least 23 feet of water over the top of irradiated fuel assemblies seated within the reactor pressure vessel during movement of fuel assemblies or control element assemblies (CEAs) within the reactor vessel while in Mode 6. The proposed TS replaces the applicability statement, making the LCO applicable during core alterations and during movement of irradiated fuel assemblies within containment. The definition of core alterations specifically excludes movement of the shared (4-fingered) CEAs or other evolutions performed with the upper guide structure (UGS) in place such as CEA latching/unlatching, and verification thereof. The Action Statement and Surveillance requirement for TS 3/4.9.10 are changed to reflect the change in the applicability statement.

The Unit 2 core design includes four (4-fingered) CEAs which are shared by fuel assemblies located at the outer periphery of the reactor core. During reactor disassembly, after the vessel head is removed and prior to UGS removal, these CEAs must be withdrawn into the UGS and secured in the withdrawn position by manually installing extension shaft locking devices (clamps and lock pins) at the top of their respective CEA shrouds. The 4-fingered CEAs remain within the UGS throughout the remainder of the disassembly and refueling sequence. During reactor re-assembly, these locking devices must be manually removed from the CEA extension shafts after the UGS is installed. Maintaining the refueling water level at 23 feet above the top of the reactor vessel flange, as currently required by LCO 3.9.10, results in the water surface being at a higher elevation than the deck of the UGS work platform. Consequently, operators must stand in approximately 2 feet of radioactive water and reach below the water surface to install/remove the extension shaft clamps and lock pins.

The revision to LCO 3/4.9.10 would allow the Unit 2 refueling cavity water level to be maintained below the deck elevation of the UGS work platform during refueling tasks involving the 4-fingered CEAs. Thus, the potential for radiological contamination of personnel will be reduced. The proposed changes also make clear that conformance to the conditions of the LCO is required when moving irradiated fuel assemblies within containment, e.g., such as transferring fuel between the reactor vessel and the spent fuel facility. Assurance is thereby provided that the proper cavity water level for all refueling operations in containment susceptible to fuel handling mishaps will be maintained.

During refueling operations, maintaining a minimum water level of 23 feet above the reactor vessel flange provides sufficient water to retain iodine fission product activity in the water in the event of a fuel handling accident. With the UGS in place, the fuel elements cannot be moved and the control element assemblies cannot be shuffled. The UGS also protects the fuel from the possibility of mechanical damage from objects being dropped upon it. Under these conditions, the potential for a fuel handling accident does not

exist. The proposed applicability of LCO 3/4.9.10 is consistent with the corresponding LCO 3.9.6 of the STS. By clearly stating that conformance to the conditions of the LCO is required when moving irradiated fuel assemblies within containment will minimize the possibility of a fuel handling accident in containment that is beyond the assumptions of the St. Lucie Unit 1 and Unit 2 safety analysis. Therefore, the proposed change to TS 3/4.9.10 is acceptable.

An editorial change is also being proposed for the Action statements of TS 3/4.9.9 for both units. For Unit 1, the statement that Specification 3.0.3 is not applicable is deleted, because this specification is not applicable in Modes 5 or 6, and therefore an exception is redundant. The statement that TS 3.0.4 is not applicable for Unit 2 is also redundant. TS 3.0.4 specifically allows entry into Operational Modes or conditions when the Action requirements permit continued operation for an unlimited period of time. Therefore, the deletion of these statements is an editorial change and is acceptable.

3.0 STATE CONSULTATION

Based upon the written notice of the proposed amendments, the Florida State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (61 FR 64386). 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 these amendments.

5.0 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 Contributor: L. Wiens

Date: February 10, 1997