

July 24, 1998

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

SUBJECT: ST. LUCIE UNIT 2 - ISSUANCE OF AMENDMENT REGARDING THE CORE  
OPERATING LIMITS REPORT (TAC NO. MA0600)

Dear Mr. Plunkett:

The Commission has issued the enclosed Amendment No. 92 to Facility Operating License No. NPF-16 for the St. Lucie Plant, Unit No. 2. This changes the St. Lucie Unit 2 Technical Specifications (TS) in response to your application dated December 29, 1997, as supplemented June 15, 1998. This change modifies the TSs for selected cycle-specific reactor physics parameters to refer to the St. Lucie Unit 2 Core Operating Limits Report for limiting values.

Based on our review of your submittal, the staff is concerned about your failure to recognize that certain of the referenced documents did not exist as they were listed. As a result, the amendment application review had to be held, your vendor consulted, and the application supplemented. These problems indicate that changes are needed to the quality assurance process used at the site for the creation and review of licensing submittals whose primary inputs are from outside sources.

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,

/s/

William C. Gleaves, Project Manager  
Project Directorate II-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

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PDR ADOCK 05000389  
P PDR

Docket No. 50-389

Enclosures:

- 1. Amendment No. 92 to NPF-16
- 2. Safety Evaluation

cc w/enclosures: See next page

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\*See Previous Concurrence

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 24, 1998

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

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Based on our review of your submittal, the staff is concerned about your failure to recognize that certain of the referenced documents did not exist as they were listed. As a result, the amendment application review had to be held, your vendor consulted, and the application supplemented. This matter is of sufficient concern that we request you ensure that the expectations held by FPL are being fulfilled in the processing of licensing submittals whose primary inputs are from outside sources.

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,

A handwritten signature in black ink, appearing to read "Wm C Gleaves".

William C. Gleaves, Project Manager  
Project Directorate II-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-389

Enclosures:

1. Amendment No.92 to NPF-16
2. Safety Evaluation

cc w/enclosures: See next page

Mr. T. F. Plunkett  
Florida Power and Light Company

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

FLORIDA POWER & LIGHT COMPANY

DOCKET NO. 50-389

ST. LUCIE PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 92  
License No. NPF-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power & Light Company (FPL), dated December 29, 1997, as supplemented June 15, 1998, 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.

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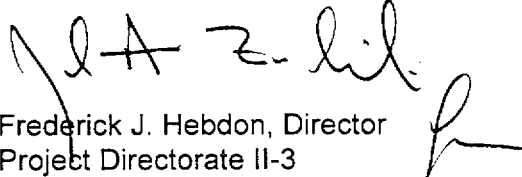
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-16.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 92 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specification.

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

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: July 24, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 92

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. The corresponding overleaf pages are also provided to maintain document completeness.

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## DEFINITIONS

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### CHANNEL FUNCTIONAL TEST

- 1.6 A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

### CONTAINMENT VESSEL INTEGRITY

- 1.7 CONTAINMENT VESSEL INTEGRITY shall exist when:
- a. All containment vessel penetrations required to be closed during accident conditions are either:
    1. Capable of being closed by an OPERABLE containment automatic isolation valve system, or
    2. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except for valves that are open on an intermittent basis under administrative control.
  - b. All containment vessel equipment hatches are closed and sealed,
  - c. Each containment vessel air lock is in compliance with the requirements of Specification 3.6.1.3,
  - d. The containment leakage rates are within the limits of Specification 3.6.1.2, and
  - e. The sealing mechanism associated with each penetration (e.g., welds, bellows or O-rings) is OPERABLE.

### CONTROLLED LEAKAGE

- 1.8 CONTROLLED LEAKAGE shall be the seal water flow supplied from the reactor coolant pump seals.

### CORE ALTERATION

- 1.9 CORE ALTERATION shall be the movement or manipulation of any fuel, sources, reactivity control components, or other components affecting reactivity within the reactor vessel with the vessel head removed and fuel in the vessel. Exceptions to the above include shared (4 fingered) control element assemblies (CEAs) withdrawn into the upper guide structure (UGS) or evolutions performed with the UGS in place such as CEA latching/unlatching or verification of latching/unlatching which do not constitute a CORE ALTERATION. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

### CORE OPERATING LIMITS REPORT (COLR)

- 1.9a The COLR is the unit-specific document that provides cycle specific parameter limits for the current operating reload cycle. These cycle-specific parameter limits shall be determined for each reload cycle in accordance with Specification 6.9.1.11. Plant operation within these limits is addressed in individual Specifications.

## REACTIVITY CONTROL SYSTEMS

### MODERATOR TEMPERATURE COEFFICIENT

#### LIMITING CONDITION FOR OPERATION

---

- 3.1.1.4 The moderator temperature coefficient (MTC) shall be maintained within the limits specified in the COLR. The maximum positive limit shall be:
- a. Less positive than +5 pcm/°F at  $\leq 70\%$  RATED THERMAL POWER, and
  - b. Less positive than +3 pcm/°F at  $> 70\%$  RATED THERMAL POWER.

APPLICABILITY: MODES 1 and 2\*#.

#### ACTION:

With the moderator temperature coefficient outside any one of the above limits, be in at least HOT STANDBY within 6 hours.

#### SURVEILLANCE REQUIREMENTS

---

- 4.1.1.4.1 The MTC shall be determined to be within its limits by confirmatory measurements. MTC measured values shall be extrapolated and/or compensated to permit direct comparison with the above limits.
- 4.1.1.4.2 The MTC shall be determined at the following frequencies and THERMAL POWER conditions during each fuel cycle:
- a. Prior to initial operation above 5% of RATED THERMAL POWER, after each fuel loading.
  - b. At any THERMAL POWER, within 7 EFPD after reaching a RATED THERMAL POWER equilibrium boron concentration of 800 ppm.
  - c. At any THERMAL POWER, within 7 EFPD after reaching a RATED THERMAL POWER equilibrium boron concentration of 300 ppm.

---

\*With  $K_{\text{eff}}$  greater than or equal to 1.0.

#See Special Test Exceptions 3.10.2 and 3.10.5.

## REACTIVITY CONTROL SYSTEMS

### 3/4.1.3 MOVABLE CONTROL ASSEMBLIES

#### CEA POSITION

#### LIMITING CONDITION FOR OPERATION

---

3.1.3.1 The CEA Block Circuit and all full-length (shutdown and regulating) CEAs which are inserted in the core, shall be OPERABLE with each CEA of a given group positioned within 7.0 inches (indicated position) of all other CEAs in its group.

APPLICABILITY: MODES 1\* and 2\*.

#### ACTION:

- a. With one or more full-length CEAs inoperable due to being immovable as a result of excessive friction or mechanical interference or known to be untrippable, determine that the SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is satisfied within 1 hour and be in at least HOT STANDBY within 6 hours.
- b. With the CEA Block Circuit inoperable, within 6 hours either:
  1. With one CEA position indicator per group inoperable take action per Specification 3.1.3.2, or
  2. With the group overlap and/or sequencing interlocks inoperable maintain CEA groups 1, 2, 3 and 4 fully withdrawn and the CEAs in group 5 to less than 15% insertion and place and maintain CEA drive system in either the "Manual" or "Off" position, or
  3. Be in at least HOT STANDBY.
- c. With more than one full-length CEA inoperable or misaligned from any other CEA in its group by more than 15 inches (indicated position), be in at least HOT STANDBY within 6 hours.
- d. With one full-length CEA misaligned from any other CEA in its group by more than 15 inches, operation in MODES 1 and 2 may continue, provided that the misaligned CEA is positioned within 15 inches of the other CEAs in its group in accordance with the time constraints shown in COLR Figure 3.1-1a.

---

\*See Special Test Exceptions 3.10.2 , 3.10.4 and 3.10.5.

## REACTIVITY CONTROL SYSTEMS

### ACTION: (Continued)

- e. With one full-length CEA misaligned from any other CEA in its group by more than 15 inches beyond the time constraints shown in COLR Figure 3.1-1a, reduce power to  $\leq 70\%$  of RATED THERMAL POWER prior to completing ACTION e.1 or e.2.
1. Restore the CEA to OPERABLE status within its specified alignment requirements, or
  2. Declare the CEA inoperable and satisfy SHUTDOWN MARGIN requirement of Specification 3.1.1.1. After declaring the CEA inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6 provided:
    - a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA shall be aligned to within 7.0 inches of the inoperable CEA while maintaining the allowable CEA sequence and insertion limits shown on COLR Figure 3.1-2; the THERMAL POWER level shall be restricted pursuant to Specification 3.1.3.6 during subsequent operation.
    - b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is determined at least once per 12 hours.

Otherwise, be in at least HOT STANDBY within the next 6 hours.

- f. With one or more full-length CEA(s) misaligned from any other CEAs in its group by more than 7.0 inches but less than or equal to 15 inches, operation in MODES 1 and 2 may continue, provided that within 1 hour the misaligned CEA(s) is either:
1. Restored to OPERABLE status within its above specified alignment requirements, or
  2. Declared inoperable and the SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is satisfied. After declaring the CEA inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6 provided:
    - a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA shall be aligned to within 7.0 inches of the inoperable CEA while maintaining the allowable CEA sequence and insertion limits shown on COLR Figure 3.1-2; the THERMAL POWER level shall be restricted pursuant to Specification 3.1.3.6 during subsequent operation.
    - b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is determined at least once per 12 hours.

Otherwise, be in at least HOT STANDBY within the next 6 hours.

- g. With one full-length CEA inoperable due to causes other than addressed by ACTION a., above, and inserted beyond the Long Term Steady State Insertion Limits but within its above specified alignment requirements, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6.

---

\* If the pre-misalignment ASI was more negative than -0.15, reduce power to  $\leq 70\%$  of RATED THERMAL POWER or 70% of the THERMAL POWER level prior to the misalignment, whichever is less, prior to completing ACTION e.2.a) and e.2.b).

## REACTIVITY CONTROL SYSTEMS

### ACTION: (Continued)

- h. With one full-length CEA inoperable due to causes other than addressed by ACTION a., above, but within its above specified alignment requirements and either fully withdrawn or within the Long Term Steady State Insertion Limits if in full-length CEA group 5, operation in MODES 1 and 2 may continue.

### SURVEILLANCE REQUIREMENTS

---

- 4.1.3.1.1 The Position of each full-length CEA shall be determined to be within 7.0 inches (indicated position) of all other CEAs in its group at least once per 12 hours except during time intervals when the Deviation Circuit and/or CEA Block Circuit are inoperable, then verify the individual CEA positions at least once per 4 hours.
- 4.1.3.1.2 Each full-length CEA not fully inserted in the core shall be determined to be OPERABLE by movement of at least 7.0 inches in any one direction at least once per 92 days.
- 4.1.3.1.3 The CEA Block Circuit shall be demonstrated OPERABLE at least once per 92 days by a functional test which verifies that the circuit prevents any CEA from being misaligned from all other CEAs in its group by more than 7.0 inches (indicated position).
- 4.1.3.1.4 The CEA Block Circuit shall be demonstrated OPERABLE by a functional test which verifies that the circuit maintains the CEA group overlap and sequencing requirements of Specification 3.1.3.6 and that the circuit prevents the regulating CEAs from being inserted beyond the Power Dependent Insertion Limit of COLR Figure 3.1-2:
  - \*a. Prior to each entry into MODE 2 from MODE 3, except that such verification need not be performed more often than once per 92 days, and
  - b. At least once per 6 months.

---

\* The licensee shall be excepted from compliance during the initial startup test program for an entry into MODE 2 from MODE 3 made in association with a measurement of power defect.

## REACTIVITY CONTROL SYSTEMS

### REGULATING CEA INSERTION LIMITS

#### LIMITING CONDITION FOR OPERATION

---

3.1.3.6 The regulating CEA groups shall be limited to the withdrawal sequence and to the insertion limits shown on COLR Figure 3.1-2 (regulating CEAs are considered to be fully withdrawn in accordance with COLR Figure 3.1-2 when withdrawn to greater than or equal to 129.0 inches), with CEA insertion between the Long Term Steady State Insertion Limits and the Power Dependent Insertion Limits restricted to:

- a. Less than or equal to 4 hours per 24 hour interval,
- b. Less than or equal to 5 Effective Full Power Days per 30 Effective Full Power Day interval, and
- c. Less than or equal to 14 Effective Full Power Days per calendar year.

APPLICABILITY: MODES 1\* and 2\*#.

#### ACTION:

- a. With the regulating CEA groups inserted beyond the Power Dependent Insertion Limits, except for surveillance testing pursuant to Specification 4.1.3.1.2, within 2 hours either:
  1. Restore the regulating CEA groups to within the limits, or
  2. Reduce THERMAL POWER to less than or equal to that fraction of RATED THERMAL POWER which is allowed by the CEA group position and insertion limits specified in the COLR .
- b. With the regulating CEA groups inserted between the Long Term Steady State Insertion Limits and the Power Dependent Insertion Limits for intervals greater than 4 hours per 24 hour interval, operation may proceed provided either:
  1. The Short Term Steady State Insertion Limits are not exceeded, or
  2. Any subsequent increase in THERMAL POWER is restricted to less than or equal to 5% of RATED THERMAL POWER per hour.

\*See Special Test Exceptions 3.10.2, 3.10.4 and 3.10.5.

#With  $K_{eff}$  greater than or equal to 1.0.

## 3/4.2 POWER DISTRIBUTION LIMITS

### 3/4 2.1 LINEAR HEAT RATE

#### LIMITING CONDITION FOR OPERATION

---

3.2.1 The linear heat rate shall not exceed the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTION:

With the linear heat rate exceeding its limits, as indicated by four or more coincident incore channels or by the AXIAL SHAPE INDEX outside of the power dependent control limits of COLR Figure 3.2-2, within 15 minutes initiate corrective action to reduce the linear heat rate to within the limits and either:

- a. Restore the linear heat rate to within its limits within 1 hour, or
- b. Be in at least HOT STANDBY within the next 6 hours.

#### SURVEILLANCE REQUIREMENTS

---

4.2.1.1 The provisions of Specification 4.0.4 are not applicable.

4.2.1.2 The linear heat rate shall be determined to be within its limits by continuously monitoring the core power distribution with either the excore detector monitoring system or with the incore detector monitoring system.

4.2.1.3 Excore Detector Monitoring System - The excore detector monitoring system may be used for monitoring the linear heat rate by :

- a. Verifying at least once per 12 hours that the full-length CEAs are withdrawn to and maintained at or beyond the Long Term Steady State Insertion Limit of Specification 3.1.3.6.
- b. Verifying at least once per 31 days that the AXIAL SHAPE INDEX alarm setpoints are adjusted to within the limit shown on COLR Figure 3.2-2 .



## POWER DISTRIBUTION LIMITS

### SURVEILLANCE REQUIREMENTS (Continued)

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- c. Verifying that the AXIAL SHAPE INDEX is maintained within the allowable limits of COLR Figure 3.2-2, where 100% of maximum allowable power represents the maximum THERMAL POWER allowed by the following expression:

$$M \times N$$

where:

1. M is the maximum allowable THERMAL POWER level for the existing Reactor Coolant Pump combination.
2. N is the maximum allowable fraction of RATED THERMAL POWER as determined by the  $F_{xy}^T$  curve of COLR Figure 3.2-3 .

4.2.1.4 Incore Detector Monitoring System # - The incore detector monitoring system may be used for monitoring the linear heat rate by verifying that the incore detector Local Power Density alarms:

- a. Are adjusted to satisfy the requirements of the core power distribution map which shall be updated at least once per 31 days of accumulated operation in MODE 1.
- b. Have their alarm setpoint adjusted to less than or equal to the limits shown on COLR Figure 3.2-1 .

---

# If incore system becomes inoperable, reduce power to M x N within 4 hours and monitor linear heat rate in accordance with Specification 4.2.1.3.

Pages 3/4 2-4 (Amendment 42), 3/4 2-5 (Amendment 8), and 3/4 2-6 (Amendment 17) have been deleted from the Technical Specifications. The next page is 3/4 2-7.

## POWER DISTRIBUTION LIMITS

### 3/4.2.2 TOTAL PLANAR RADIAL PEAKING FACTORS - $F_{xy}^T$

#### LIMITING CONDITION FOR OPERATION

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3.2.2 The calculated value of  $F_{xy}^T$  shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1\*.

ACTION:

With  $F_{xy}^T$  not within limits, within 6 hours either :

- a. Reduce THERMAL POWER to bring the combination of THERMAL POWER and  $F_{xy}^T$  to within the limits of COLR Figure 3.2-3 and withdraw the full length CEAs to or beyond the Long Term Steady State Insertion Limits of Specification 3.1.3.6; or
- b. Be in HOT STANDBY.

#### SURVEILLANCE REQUIREMENTS

---

4.2.2.1 The provisions of Specification 4.0.4 are not applicable.

4.2.2.2  $F_{xy}^T$  shall be calculated by the expression  $F_{xy}^T = F_{xy} (1+T_q)$  when  $F_{xy}$  is calculated with a non-full core power distribution analysis code and shall be calculated as  $F_{xy}^T = F_{xy}$  when calculations are performed with a full core power distribution analysis code.  $F_{xy}^T$  shall be determined to be within its limit at the following intervals:

- a. Prior to operation above 70% of RATED THERMAL POWER after each fuel loading,
- b. At least once per 31 days of accumulated operation in MODE 1, and
- c. Within 4 hours if the AZIMUTHAL POWER TILT ( $T_q$ ) is  $> 0.03$ .

---

\*See Special Test Exception 3.10.2.

## POWER DISTRIBUTION LIMITS

### TOTAL INTEGRATED RADIAL PEAKING FACTORS - $F_r^T$

#### LIMITING CONDITION FOR OPERATION

---

3.2.3 The calculated value of  $F_r^T$  shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1\*.

ACTION:

With  $F_r^T$  not within limits, within 6 hours either :

- a. Be in at least HOT STANDBY, or
- b. Reduce THERMAL POWER to bring the combination of THERMAL POWER and  $F_r^T$  to within the limits of COLR Figure 3.2-3 and withdraw the full-length CEAs to or beyond the Long Term Steady State Insertion Limits of Specification 3.1.3.6. The THERMAL POWER limit determined from COLR Figure 3.2-3 shall then be used to establish a revised upper THERMAL POWER level limit on COLR Figure 3.2-4 (truncate COLR Figure 3.2-4 at the allowable fraction of RATED THERMAL POWER determined by COLR Figure 3.2-3) and subsequent operation shall be maintained within the reduced acceptable operation region of COLR Figure 3.2-4.

#### SURVEILLANCE REQUIREMENTS

---

4.2.3.1 The provisions of Specification 4.0.4 are not applicable.

4.2.3.2  $F_r^T$  shall be calculated by the expression  $F_r^T = F_r(1+T_q)$  when  $F_r$  is calculated with a non-full core power distribution analysis code and shall be calculated as  $F_r^T = F_r$  when calculations are performed with a full core power distribution analysis code.  $F_r^T$  shall be determined to be within its limit at the following intervals:

- a. Prior to operation above 70% of RATED THERMAL POWER after each fuel loading,
- b. At least once per 31 days of accumulated operation in MODE 1, and
- c. Within 4 hours if the AZIMUTHAL POWER TILT ( $T_q$ ) is  $> 0.03$ .

---

\*See Special Test Exception 3.10.2.

## 3/4.2 POWER DISTRIBUTION LIMITS

### BASES

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#### 3/4.2.1 LINEAR HEAT RATE

The limitation on linear heat rate ensures that in the event of a LOCA, the peak temperature of the fuel cladding will not exceed 2200°F.

Either of the two core power distribution monitoring systems, the Excore Detector Monitoring System and the Incore Detector Monitoring System, provides adequate monitoring of the core power distribution and are capable of verifying that the linear heat rate does not exceed its limits. The Excore Detector Monitoring System performs this function by continuously monitoring the AXIAL SHAPE INDEX with the OPERABLE quadrant symmetric excore neutron flux detectors and verifying that the AXIAL SHAPE INDEX is maintained within the allowable limits of COLR Figure 3.2-2. In conjunction with the use of the excore monitoring system and in establishing the AXIAL SHAPE INDEX limits, the following assumptions are made: (1) the CEA insertion limits of Specifications 3.1.3.5 and 3.1.3.6 are satisfied, (2) the AZIMUTHAL POWER TILT restrictions of Specification 3.2.4 are satisfied, and (3) the TOTAL PLANAR RADIAL PEAKING FACTOR does not exceed the limits of Specification 3.2.2.

The Incore Detector Monitoring System continuously provides a direct measure of the peaking factors and the alarms which have been established for the individual incore detector segments ensure that the peak linear heat rates will be maintained within the allowable limits of COLR Figure 3.2-1. The setpoints for these alarms include allowances, set in the conservative directions, for (1) a measurement-calculational uncertainty factor, (2) an engineering uncertainty factor, (3) an allowance for axial fuel densification and thermal expansion, and (4) a THERMAL POWER measurement uncertainty factor.

#### 3/4.2.2, 3/4.2.3 and 3/4.2.4 TOTAL PLANAR AND INTEGRATED RADIAL PEAKING FACTORS - $F_{xy}^T$ AND $F_r^T$ AND AZIMUTHAL POWER TILT - $T_q$

The limitations of  $F_{xy}^T$  and  $T_q$  are provided to ensure that the assumptions used in the analysis for establishing the Linear Heat Rate and Local Power Density - High LCOs and LSSS setpoints remain valid during operation at the various allowable CEA group insertion limits. The limitations on  $F_r^T$  and  $T_q$  are provided to ensure that the assumptions used in the analysis establishing the DNB Margin LCO, the Thermal Margin/Low Pressure LSSS setpoints remain valid during operation at the various allowable CEA group insertion limits. If  $F_{xy}^T$ ,  $F_r^T$  or  $T_q$  exceed their basic limitations, operation may continue under the additional restrictions imposed by the ACTION statements since these additional restrictions provide adequate provisions to assure that the

Page 3/4 2-12 (Amendment 42) has been deleted from the Technical Specifications. The next page is 3/4 2-13.

TABLE 3.2-2  
DNB MARGIN  
LIMITS

<u>PARAMETER</u>	<u>FOUR REACTOR COOLANT PUMPS OPERATING</u>
Cold Leg Temperature (Narrow Range)	$535^{\circ}\text{F}^* \leq T \leq 549^{\circ}\text{F}$
Pressurizer Pressure	$2225 \text{ psia}^{**} \leq P_{\text{PZR}} \leq 2350 \text{ psia}^*$
Reactor Coolant Flow Rate	$\geq 363,000 \text{ gpm}$
AXIAL SHAPE INDEX	COLR Figure 3.2-4

\* Applicable only if power level  $\geq 70\%$  RATED THERMAL POWER.

\*\* Limit not applicable during either a THERMAL POWER ramp increase in excess of 5% of RATED THERMAL POWER or a THERMAL POWER step increase of greater than 10% of RATED THERMAL POWER.

### 3/4.9 REFUELING OPERATIONS

#### BASES

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#### 3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the safety analyses. The value specified in the COLR for  $K_{eff}$  includes a 1% delta k/k conservative allowance for uncertainties. Similarly, the boron concentration value specified in the COLR includes a conservative uncertainty allowance of 50 ppm boron.

#### 3/4.9.2 INSTRUMENTATION

The OPERABILITY of the startup neutron flux monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core.

#### 3/4.9.3 DECAY TIME

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor pressure vessel ensures that sufficient time has elapsed to allow the radioactive decay of the short lived fission products. This decay time is consistent with the assumptions used in the safety analyses.

#### 3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

The requirements on containment penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

#### 3/4.9.5 COMMUNICATIONS

The requirement for communications capability ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity condition during CORE ALTERATIONS.



### 3/4.9 REFUELING OPERATIONS

#### 3/4.9.1 BORON CONCENTRATION

##### LIMITING CONDITION FOR OPERATION

---

- 3.9.1 With the reactor vessel head closure bolts less than fully tensioned or with the head removed, the boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be maintained within the limit specified in the COLR.

APPLICABILITY: MODE 6\*.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate and continue boration at greater than or equal to 40 gpm of a solution containing 1720 ppm boron or greater to restore boron concentration to within limits.

##### SURVEILLANCE REQUIREMENTS

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- 4.9.1.1 The boron concentration limit shall be determined prior to :
- a. Removing or unbolting the reactor vessel head, and
  - b. Withdrawal of any full length CEA in excess of 3 feet from its fully inserted position within the reactor pressure vessel.
- 4.9.1.2 The boron concentration of the reactor coolant system and the refueling canal shall be determined by chemical analysis at least once per 72 hours.

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\* The reactor shall be maintained in MODE 6 whenever fuel is in the reactor vessel with the reactor vessel head closure bolts less than fully tensioned or with the head removed.

MOVABLE CONTROL ASSEMBLIES (Continued)

Overpower margin is provided to protect the core in the event of a large misalignment ( $\geq 15$  inches) of a CEA. However, this misalignment would cause distortion of the core power distribution. This distribution may, in turn, have a significant effect on (1) the available SHUTDOWN MARGIN, (2) the time-dependent long-term power distributions relative to those used in generating LCOs and LSSS setpoints, and (3) the ejected CEA worth used in the safety analysis. Therefore, the ACTION statement associated with the large misalignment of a CEA requires a prompt realignment of the misaligned CEA.

The ACTION statements applicable to misaligned or inoperable CEAs include requirements to align the OPERABLE CEAs in a given group with the inoperable CEA. Conformance with these alignment requirements bring the core, within a short period of time, to a configuration consistent with that assumed in generating LCO and LSSS setpoints. However, extended operation with CEAs significantly inserted in the core may lead to perturbations in (1) local burnup, (2) peaking factors, and (3) available shutdown margin which are more adverse than the conditions assumed to exist in the safety analyses and LCO and LSSS setpoints determination. Therefore, time limits have been imposed on operation with inoperable CEAs to preclude such adverse conditions from developing.

The requirement to reduce power in certain time limits depending upon the previous  $F_r^T$  is to eliminate a potential nonconservatism for situations when a CEA has been declared inoperable. A worst-case analysis has shown that a DNBR SAFDL violation may occur during the second hour after the CEA misalignment if this requirement is not met. This potential DNBR SAFDL violation is eliminated by limiting the time operation is permitted at full power before power reductions are required. These reductions will be necessary once the deviated CEA has been declared inoperable. This time allowed for continued operation at a reduced power level can be permitted for the following reasons:

1. The margin calculations which support the Technical Specifications are based on a steady-state radial peak of  $F_r^T =$  the limits of Specification 3.2.3.
2. When the actual  $F_r^T <$  the limits of Specification 3.2.3, significant additional margin exists.
3. This additional margin can be credited to offset the increase in  $F_r^T$  with time that can occur following a CEA misalignment.
4. This increase in  $F_r^T$  is caused by xenon redistribution.
5. The present analysis can support allowing a misalignment to exist without correction, if the time constraints and initial  $F_r^T$  limits of COLR Figure 3.1-1a are met.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT (Continued)

6.9.1.9 At least once every 5 years, an estimate of the actual population within 10 miles of the plant shall be prepared and submitted to the NRC.

6.9.1.10 At least once every 10 years, an estimate of the actual population within 50 miles of the plant shall be prepared and submitted to the NRC.

6.9.1.11 CORE OPERATING LIMITS REPORT (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

- Specification 3.1.1.4 Moderator Temperature Coefficient
- Specification 3.1.3.1 Movable Control Assemblies - CEA Position
- Specification 3.1.3.6 Regulating CEA Insertion Limits
- Specification 3.2.1 Linear Heat Rate
- Specification 3.2.2 Total Planar Radial Peaking Factors -  $F_{xy}^T$
- Specification 3.2.3 Total Integrated Radial Peaking Factor -  $F_r^T$
- Specification 3.2.5 DNB Parameters - Axial Shape Index
- Specification 3.9.1 Refueling Operations - Boron Concentration

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, as described in the following documents or any approved Revisions and Supplements thereto:

1. WCAP-11596-P-A, "Qualification of the PHOENIX-P/ANC Nuclear Design System for Pressurized Water Reactor Cores," June 1988 (Westinghouse Proprietary).
2. NF-TR-95-01, "Nuclear Physics Methodology for Reload Design of Turkey Point & St. Lucie Nuclear Plants," Florida Power & Light Company, January 1995.
3. CENPD-199-P, Rev. 1-P-A, "C-E Setpoint Methodology: CE Local Power Density and DNB LSSS and LCO Setpoint Methodology for Analog Protection Systems," January 1986.
4. CENPD-266-P-A, "The ROCS and DIT Computer Code for Nuclear Design," April 1983.
5. CENPD-275-P, Revision 1-P-A, "C-E Methodology for Core Designs Containing Gadolinia-Urania Burnable Absorbers," May 1988.
6. CENPD-188-A, "HERMITE: A Multi-Dimensional Space - Time Kinetics Code for PWR Transients," July 1976.

CORE OPERATING LIMITS REPORT (COLR) (Continued)

b. (Continued)

7. CENPD-153-P, Rev. 1-P-A, "Evaluation of Uncertainty in the Nuclear Power Peaking Measured by the Self-Powered, Fixed Incore Detector System," May 1980.
8. CEN-123(F)-P, "Statistical Combination of Uncertainties Methodology Part 1: CE Calculated Local Power Density and Thermal Margin/Low Pressure LSSS for St. Lucie Unit 1," December 1979.
9. CEN-123(F)-P, "Statistical Combination of Uncertainties Methodology Part 2: Combination of System Parameter Uncertainties in Thermal Margin Analyses for St. Lucie Unit 1," January 1980.
10. CEN-123(F)-P, "Statistical Combination of Uncertainties Methodology Part 3: CE Calculated Departure from Nucleate Boiling and Linear Heat Rate Limiting Conditions for Operation for St. Lucie Unit 1," February 1980.
11. CEN-191(B)-P, "CETOP-D Code Structure and Modeling Methods for Calvert Cliffs Units 1 and 2," December 1981.
12. Letter, J.W. Miller (NRC) to J.R. Williams, Jr. (FPL), Docket No. 50-389, Regarding Unit 2 Cycle 2 License Approval (Amendment No. 8 to NPF-16 and SER), November 9, 1984 (Approval of CEN-123(F)-P (three parts) and CEN-191(B)-P).
13. CEN-371(F)-P, "Extended Statistical Combination of Uncertainties," July 1989.
14. Letter, J.A. Norris (NRC) to J.H. Goldberg (FPL), Docket No. 50-389, "St. Lucie Unit 2 - Change to Technical Specification Bases Sections '2.1.1 Reactor Core' and '3/4.2.5 DNB Parameters' (TAC No. M87722)," March 14, 1994 (Approval of CEN-371(F)-P).
15. CENPD-161-P-A, "TORC Code, A Computer Code for Determining the Thermal Margin of a Reactor Core," April 1986.
16. CENPD-162-P-A, "Critical Heat Flux Correlation for C-E Fuel Assemblies with Standard Spacer Grids Part 1, Uniform Axial Power Distribution," April 1975.
17. CENPD-207-P-A, "Critical Heat Flux Correlation for C-E Fuel Assemblies with Standard Spacer Grids Part 2, Non-uniform Axial Power Distribution," December 1984.
18. CENPD-206-P-A, "TORC Code, Verification and Simplified Modeling Methods," June 1981.

CORE OPERATING LIMITS REPORT (COLR) (Continued)

b. (Continued)

19. CENPD-225-P-A, "Fuel and Poison Rod Bowing," June 1983.
20. CENPD-139-P-A, "C-E Fuel Evaluation Model Topical Report," July 1974.
21. CEN-161(B)-P-A, "Improvements to Fuel Evaluation Model," August 1989.
22. CEN-161(B)-P, Supplement 1-P-A, "Improvements to Fuel Evaluation Model," January 1992.
23. CENPD-132, Supplement 3-P-A, "Calculative Methods for the C-E Large Break LOCA Evaluation Model for the Analysis of C-E and W Designed NSSS," June 1985.
24. CENPD-133, Supplement 5-A, "CEFLASH-4A, A FORTRAN77 Digital Computer Program for Reactor Blowdown Analysis," June 1985.
25. CENPD-134, Supplement 2-A, "COMPERC-II, a Program for Emergency Refill-Reflood of the Core," June 1985.
26. CENPD-135-P, Supplement 5, "STRIKIN-II, A Cylindrical Geometry Fuel Rod Heat Transfer Program," April 1977.
27. Letter, R.L. Baer (NRC) to A.E. Scherer (CE), "Evaluation of Topical Report CENPD-135, Supplement #5," September 6, 1978.
28. CENPD-137, Supplement 1-P, "Calculative Methods for the C-E Small Break LOCA Evaluation Model," January 1977.
29. CENPD-133, Supplement 3-P, "CEFLASH-4AS, A Computer Program for the Reactor Blowdown Analysis of the Small Break Loss of Coolant Accident," January 1977.
30. Letter, K. Kniel (NRC) to A.E. Scherer (CE), "Evaluation of Topical Reports CENPD-133, Supplement 3-P and CENPD-137, Supplement 1-P," September 27, 1977.
31. CENPD-138, Supplement 2-P, "PARCH, A FORTRAN-IV Digital Program to Evaluate Pool Boiling, Axial Rod and Coolant Heatup," January 1977.
32. Letter, C. Aniel (NRC) to A.E. Scherer (CE), "Evaluation of Topical Report CENPD-138, Supplement 2-P," April 10, 1978.
33. Letter, W.H. Bohlke (FPL) to Document Control Desk (NRC), "St. Lucie Unit 2, Docket No. 50-389, Proposed License Amendment, MTC Change from -27 pcm to -30 pcm," L-91-325, December 17, 1991.

CORE OPERATING LIMITS REPORT (COLR) (Continued)

b. (Continued)

34. Letter, J.A. Norris (NRC) to J.H. Goldberg (FPL), "St. Lucie Unit 2- Issuance of Amendment Re: Moderator Temperature Coefficient (TAC No. M82517)," July 15, 1992.
35. Letter, J.W. Williams, Jr. (FPL) to D.G. Eisenhut (NRC), "St. Lucie Unit No. 2, Docket No. 50-389, Proposed License Amendment, Cycle 2 Reload," L-84-148, June 4, 1984.
36. Letter, J.R. Miller (NRC) to J.W. Williams, Jr. (FPL), Docket No. 50-389, Regarding Unit 2 Cycle 2 License Approval (Amendment No. 8 to NPF-16 and SER), November 9, 1984 (Approval of Methodology contained in L-84-148).
37. Letter, A.E. Scherer Enclosure 1-P to LD-82-001, "CESEC-Digital Simulation of a Combustion Engineering Nuclear Steam Supply System," December 1981.
38. Safety Evaluation Report, "CESEC Digital Simulation of a Combustion Engineering Steam Supply System (TAC No.: 01142)," October 27, 1983.
39. CENPD-282-P-A, Volumes 1, 2 and 3, and Supplement 1, "Technical Manual for the CENTS Code," February 1991, February 1991, October 1991, and June 1993, respectively.

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SHUTDOWN MARGIN, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any mid cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the NRC within the time period specified for each report.

6.10 RECORD RETENTION

In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

- 6.10.1 The following records shall be retained for at least 5 years:
- a. Records and logs of unit operation covering time interval at each power level.
  - b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
  - c. ALL REPORTABLE EVENTS.
  - d. Records of surveillance activities; inspections and calibrations required by these Technical Specifications.
  - e. Records of changes made to the procedures required by Specification 6.8.1.

(continued on page 6-21)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATING TO AMENDMENT NO. 92 TO FACILITY

OPERATING LICENSE NO. NPF-16

FLORIDA POWER & LIGHT COMPANY

ST. LUCIE, UNIT 2

DOCKET NO. 50-389

1.0 INTRODUCTION

By letter dated December 29, 1997, as supplemented June 15, 1998, Florida Power & Light Company (FPL) requested changes to the St. Lucie Unit 2 Technical Specifications (TS) to modify specifications for selected cycle-specific reactor physics parameters to refer to the Core Operating Limits Report (COLR) for limiting values. Specifically, the cycle-specific parameters for moderator temperature coefficient (MTC), full-length control element assembly (CEA) position misalignment greater than 15 inches, regulating CEA insertion limits, linear heat rate, total planar radial peaking factor ( $F_{xy}^T$ ), total integrated radial peaking factor ( $F_r^T$ ), axial shape index, and refueling boron concentration. The proposed changes also include the addition of the COLR to the Definitions section and to the reporting requirements of the Administrative Controls section of TS.

The June 15, 1998, supplement provided clarifying information that did not change the scope of the December 29, 1997 application and the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The licensee's proposed changes to the TS are in accordance with the guidance provided by NRC Generic Letter 88-16 and are addressed below.

- (1) The Definition section of the TS was modified to include a definition of the COLR that requires cycle/reload-specific parameter limits to be established on a unit-specific basis in accordance with an NRC approved methodology that maintains the limits of the safety analysis. The definition notes that plant operation within these limits is addressed by individual specifications.
- (2) The following specifications were revised to replace the values of cycle-specific parameter limits with a reference to the COLR that provides these limits:



(a) Specification 3.1.1.4

The LCO [limiting condition for operation] for the MTC has been revised to refer to the limits specified in the COLR. The maximum positive limit still remains in the TS.

(b) Specification 3.1.3.1

The time constraints for full power operation with the misalignment of one full length CEA by more than 15 inches from any other CEA in its group are relocated to the COLR. The power dependent insertion limit, in surveillance requirement 4.1.3.1.4, has been relocated to the COLR.

(c) Specification 3.1.3.6

The regulating CEA group withdrawal sequence and insertion limits for this specification are relocated to the COLR.

(d) Specification 3.2.1

The linear heat rate limits for this specification are relocated to the COLR. The axial shape index vs. fraction of maximum allowable power level and the allowable combinations of thermal power and  $F_r^T$ ,  $F_{xy}^T$ , are relocated to the COLR.

(e) Specification 3.2.2

The  $F_{xy}^T$  limit for this specification is relocated to the COLR.

(f) Specification 3.2.3

The  $F_r^T$  limits for this specification are relocated to the COLR. The axial shape index operating limits with four reactor coolant pumps operating are relocated to the COLR.

(g) Specification 3.2.5 (Table 3.2-2)

The axial shape index limits for this specification are relocated to the COLR.

(h) Specification 3.9.1

The boron concentration limit of all filled portions of the reactor coolant system and the refueling canal when the reactor vessel head is unbolted or removed is relocated to the COLR. An editorial change in the associated surveillance requirement (4.9.1.1) was made necessary by the relocation of the boron concentration limit for specification 3.9.1.

These changes to the TS are acceptable in that operation of the facility will continue to be controlled consistent with 10 CFR 50.36 by inclusion of TS 6.9.1.11, which lists NRC approved methodologies that will be used to determine values for the relocated cycle-specific parameters and ensure that operation is within applicable safety limits.

In addition, the bases of affected specifications have been modified by the licensee to include appropriate reference to the COLR. Based on our review, we conclude that the changes to these bases are acceptable.

- (3) Specification 6.9.1.11 was added to the reporting requirements of the Administrative Controls section of the TS. This specification requires that the COLR, including any mid cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC. Pursuant to 10 CFR 50.4(b)(1), this report would be submitted to the Nuclear Regulatory Commission, Document Control Desk, the appropriate Regional Office, and the NRC Resident Inspector. The COLR provides the values of cycle-specific parameter limits that are applicable for the current fuel cycle. Furthermore, these specifications require that the values of these limits be established using NRC approved methodologies and be consistent with all applicable limits of the safety analysis. The approved methodologies are listed in the specification.

The list of documents in TS 6.9.1.11 describing the acceptable FPL analytical methods includes topical report NF-TR-95-01, "Nuclear Physics Methodology for Reload Design of Turkey Point & St. Lucie Nuclear Plants," dated January, 1995. This report was approved as an acceptable reference for determining COLR parameters for Units 3 and 4 of the Turkey Point plants in Amendment 174 to License No. DPR-31 and in Amendment 168 to License No. DPR-41, respectively, dated June 9, 1995, and for St. Lucie Unit 1 in Amendment 150 to DPR-67, dated April 1, 1997. Since NF-TR-95-01 did not include any benchmark data for St. Lucie Unit 2, FPL included Supplement 1 (August 1997) as an attachment to this COLR request. This supplement provides comparisons of the results of calculations performed by FPL using the methodology described in NF-TR-95-01 with operating data from St. Lucie Unit 2. The staff has reviewed the comparisons to zero power physics test measurements and at power operating data from St. Lucie Unit 2, Cycles 8 and 9. These comparisons included critical boron concentration, MTC, control rod worth, differential boron worth, boron letdown curves, and axial power distributions. We conclude that the good agreement between the predictions and the measurements reported demonstrates FPL's capability to apply the Westinghouse licensed methodology presented in NF-TR-95-01 to perform reload core design for St. Lucie Unit 2. Therefore, NF-TR-95-01 is an acceptable reference in TS 6.9.1.11 for St. Lucie Unit 2. All approved methods used to determine COLR parameters are appropriately listed in Section 6.9.1.11 of the TS in accordance with Generic Letter 88-16. Use of the approved methodologies will ensure that all applicable limits (fuel thermal, mechanical, core thermal-hydraulic, and nuclear limits such as shutdown margin, transient and accident analysis limits) of the safety analysis are met.

In addition to the revisions needed to implement the COLR, we also reviewed the following proposed changes. The phrase "core power distribution" is replaced with "linear heat rate" in TS 4.2.1.3 and 4.2.1.4 to more accurately reflect the parameter addressed by these surveillance requirements. Based on our review, we conclude that the changes to these specifications are administrative and, therefore, are acceptable.

### 3.0 STAFF CONCLUSION

On the basis of our review of the above items, we conclude that the licensee provided an acceptable response to those items addressed in the NRC guidance in Generic Letter 88-16 on modifying cycle-specific parameter limits in TS. Because plant operation of St. Lucie 2 continues to be limited in accordance with the values of cycle-specific parameter limits that are established using NRC-approved methodologies, the NRC staff concludes that these changes to the TS are acceptable. We have also reviewed the proposed administrative changes to TS 4.2.1.3 and 4.2.1.4 and conclude that they are acceptable.

The staff reviewed Supplement 1 to topical report NF-TR-95-01 provided as an enclosure to this licensing request. Based on this review, we conclude that the good agreement between predictions and Unit 2 data demonstrates FPL's capability to apply the methodology presented in NF-TR-95-01 to perform reload core design for St. Lucie Unit 2. Therefore, topical report NF-TR-95-01 is an acceptable reference in TS 6.9.1.11 for St. Lucie Unit 2.

As part of the implementation of Generic Letter 88-16, the staff has also reviewed the COLR for Cycle 10 that was provided by the licensee. On the basis of this review, the staff concludes that the format and content of the St. Lucie Unit 2 COLR are acceptable. Although Section 3.0 of the St. Lucie Unit 2, Cycle 10 COLR contains a list of approved methods, Generic Letter 88-16 requires all approved methods used to determine COLR parameters to be listed in the TS. The approved methods for St. Lucie Unit 2 are appropriately listed in Section 6.9.1.11 of the TS in accordance with Generic Letter 88-16.

### 4.0 STATE CONSULTATION

Based upon a letter dated March 8, 1991, from the State of Florida to Deborah A. Miller, NRC, the State of Florida has no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to the 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 amendment involves 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 amendment involves no significant hazards consideration and there has been no public comment on such finding (63 FR 6985). The amendment also changes reporting or record keeping requirements. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

## 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: L. Kopp, SRXB

Date: July 24, 1998