

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 150 TO FACILITY OPERATING LICENSE NO. DPR-67

FLORIDA POWER AND LIGHT COMPANY

ST. LUCIE PLANT, UNIT NO. 1

DOCKET NO. 50-335

1.0 INTRODUCTION

By letter dated December 9, 1996, Florida Power & Light Company (FPL) requested changes to the St. Lucie Unit 1 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 TS to be modified pertain to moderator temperature coefficient (MTC), full length control element assembly (CEA) position misalignment greater than 15 inches, regulating CEA insertion limits, linear heat rate, total integrated radial peaking factor (F_r), 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.

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 is to be 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 are proposed 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

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The LCO 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 15 or more inches from any other CEA in its group are provided in the COLR.

(c) Specification 3.1.3.6

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

(d) Specification 3.2.1

The linear heat rate limits for this specification are provided in the COLR. The limits for the axial shape index during operation with the linear heat rate being monitored by the excore detector monitoring system are provided in the COLR. The limits for the local power density alarm setpoints when the linear heat rate is being monitored by the incore detector monitoring system are given in the COLR.

(e) Specification 3.2.3

The total integrated radial peaking factor (F_r^T) limits for this specification are provided in the COLR.

(f) Specification 3.2.5

The axial shape index limits for this specification are provided in the COLR.

(g) Specification 3.9.1

The boron concentration limit of all filled portions of the reactor coolant system and the refueling cavity when the reactor vessel head is unbolted or removed is provided in the COLR.

The bases of affected specifications will be 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 is proposed to be 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. The report 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.

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In addition to the revisions needed to implement the COLR, the staff also reviewed the following proposed changes. The phrase "core power distribution" is to be replaced with "linear heat rate" in TS 4.2.1.3 to more accurately reflect the parameter addressed by these surveillance requirements. A footnote is to be added to TS 4.2.5.2 to indicate that the surveillance of reactor coolant system total flow rate is not required to be performed until thermal power is at least 90% of rated thermal power to allow more accurate measurement results. The statement that the provisions of TS 3.0.3 are not applicable will be deleted from TS 3.9.1 since, by definition, TS 3.0.3 is not applicable in Mode 6 (the applicable mode for TS 3.9.1). Based on our review, we conclude that the changes to these specifications are administrative and, therefore, are acceptable.

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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 1 continues to be limited in accordance with the values of cycle-specific parameter limits that are established using NRC-approved methodologies, the NRC staff finds that these changes to the TS are acceptable. We have also reviewed the proposed administrative changes to TS 4.2.1.3, 4.2.5.2, and 3.9.1 and find that they are acceptable.

As part of the implementation of Generic Letter 88-16, the staff has also reviewed the COLR for Cycle 14 that was provided by the licensee. On the basis of this review, the staff finds that the format and content of the St. Lucie Unit 1 COLR are 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 (62 FR 2189). 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 <u>CONCLUSION</u>

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the

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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. Kopp

Date: April 1, 1997