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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 64

TO FACILITY OPERATING LICENSE NO. NPF-16

FLORIDA POWER & LIGHT COMPANY, ET AL.

ST. LUCIE PLANT, UNIT NO. 2

DOCKET NO. 50-389

1.0 INTRODUCTION

By letter dated August 23, 1993 Florida Power and Light Company (FPL) requested a change to the St. Lucie Unit 2 Technical Specifications for Incore Detector Instrumentation. The revision will delete the use of movable incore detectors as an alternative means of determining operability of an incore detector location. This will allow FPL to delete the Movable Incore Detection System from the plant.

The Incore Instrumentation System at St. Lucie Unit 2 consists of the Fixed Incore Detection System (FICDS) and the Movable Incore Detection System (MICDS). The functions of the incore system are:

1) To provide data sufficient to determine the gross power distribution in the core during different operating conditions from 20 percent to 100 percent power.
2) To provide data to estimate fuel burnup in each fuel assembly.
3) To provide data for the evaluation of thermal margins in the core.
4) To assist in the calibration of the excore neutron detectors by providing azimuthal and axial power distribution information.

The Incore Instrumentation System is not used for automatic protective or control functions. These functions are based on neutron flux provided by the excore neutron detector system.

The MICDS is not a safety-related system and was included in the St. Lucie plant design as a backup to the FICDS. Functions for which the MICDS could be used to back up the FICDS include:

1) detection/verification of fixed detector failures
2) confirmation of power distribution anomalies measured by the fixed detectors

3) substitution for the fixed detectors and
4) calibration of the fixed detectors.

2.0 EVALUATION

Experience with the rhodium detectors of the Fixed Incore Detection System has shown that they completely satisfy the functions of the Incore Instrumentation System. On-line calibration of these detectors is accomplished by means of a well-established rhodium detector sensitivity depletion correlation implemented via the Digital Data Processing System.

The MICDS has never been used at St. Lucie to assist in meeting the operability requirements for incore detector locations. No correlation between the FICDS and the MICDS has been made and thus it would not be possible to use a MICDS detector to replace a FICDS detector. Because of this the MICDS has become obsolete and is no longer a useful backup system for the FICDS.

Since the Movable Incore Detection System is not used for any of the Incore Instrumentation System functions and can not even serve as a backup to the Fixed Incore Detector System, it is acceptable that reference to the MICDS be removed from the Technical Specifications.

3.0 TECHNICAL SPECIFICATION CHANGES

Technical Specification 3.3.3.2 - The statement "or an OPERABLE movable incore detector capable of mapping the location" will be removed from the statement defining an OPERABLE incore detector location.

4.0 TECHNICAL FINDING

Based on the staff evaluation in Section 2.0 above, the staff finds that the proposed Technical Specification change is acceptable. This change is consistent with the Standard Technical Specifications.

5.0 STATE CONSULTATION

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

6.0 ENVIRONMENTAL CONSIDERATION

This amendment changes 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 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding (58 FR 52985). Accordingly, this amendment

meets 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 this amendment.

7.0 CONCLUSION

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

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Date: February 8, 1994