May 17, 1999

EA 99-086

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

SUBJECT: EXERCISE OF ENFORCEMENT DISCRETION
(NRC INTEGRATED INSPECTION REPORT 50-335/99-02, 50-389/99-02)

Dear Mr. Plunkett:

On April 17, 1999, the Nuclear Regulatory Commission (NRC) completed an inspection at Florida Power and Light Company's (FPL) St. Lucie reactor facilities. The results of the inspection were discussed with you at an exit meeting conducted on April 20, 1999, and the inspection report was formally transmitted to you by letter dated May 14, 1999.

During the inspection, the NRC examined an issue identified by FPL in February 1998 involving the potential for a fire to cause a breach of the reactor coolant system high/low pressure interface boundary. This issue was also discussed by FPL at a predecisional enforcement conference held on January 7, 1999, which was conducted to address apparent violations associated with other high/low pressure interface issues and fire protection issues arising from the Fire Protection Functional Inspection of March and April 1998. Although the NRC dispositioned the other apparent violations discussed at the conference in a letter to FPL dated March 31, 1999, as discussed below, the NRC determined that additional inspection was necessary regarding this SDC isolation valve high/low pressure interface issue.

Specifically, FPL determined that since December 1995, a design deficiency had existed that could have allowed a single fire to induce the spurious opening of multiple shutdown cooling (SDC) isolation valves at a high/low pressure interface, potentially causing an intersystem loss of coolant accident. FPL and the NRC concluded that the likelihood of this occurrence was very small because of the unlikely power cable failure mode itself, fire watches, and fire detection and suppression systems that were installed in the affected fire areas to preclude this occurrence, and for other reasons as discussed in the inspection report and in Licensee Event Report (LER) No. 50-389/98-01, dated March 5, 1998. The root cause of this condition was FPL's failure to properly evaluate a 1995 plant modification with respect to the original design basis requirements for primary system high/low pressure interfaces. FPL's corrective actions included the completion of a design modification to eliminate this SDC high/low pressure interface condition in December 1998.

Based on the information developed during the inspection and the information FPL provided at the predecisional enforcement conference of January 7, 1999, the NRC has determined that the SDC isolation valve high/low pressure interface issue constitutes a violation of 10 CFR 50, Appendix R, Section III.L.7. This section of Appendix R requires that safe shutdown equipment and systems for each fire area shall be known to be isolated from associated non-safety circuits in the fire area so that hot shorts, open circuits, or shorts to ground in the associated circuits will not prevent operation of the safe shutdown equipment. In this case, in December 1995, FPL implemented a design change that modified the normal position of the SDC suction cross-tie motor operated valve (MOV V3545) from locked closed to locked open to address pressure



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locking concerns. Prior to the design change, the potential spurious opening of the train A powered or train B powered SDC suction isolation MOVs from a single fire had no significant consequences because V3545 was closed and would not have been affected by the same fire. During the design change, FPL failed to recognize that even with power removed, the SDC suction isolation valves were susceptible to fire-induced failures which could cause the valves to open. If both the SDC suction valves powered from train A or both powered from train B spuriously opened due to a fire, while V3545 was open, the reactor coolant system could over-pressurize the low pressure safety injection system causing an intersystem loss of coolant accident. This condition existed from December 1995 until November 1998. A violation involving a failure to protect or enable operation of safe shutdown equipment, for cases in which a postulated fire in the area, in the absence of additional evaluation, could so damage that equipment that shutdown could not be achieved and maintained using the applicable equipment identified in the fire hazards analysis in accordance with applicable requirements, is generally characterized as a Severity Level III violation. However, as provided in Section VII.B.3 of the Enforcement Policy (NUREG-1600), the NRC may refrain from issuing a Notice of Violation (Notice) and proposing a civil penalty for a Severity Level III violation which involves old design issues.

By letter dated March 31, 1999, the NRC exercised enforcement discretion to not cite a violation (EA 98-513) for similar issues involving the potential for a fire to cause a breach of the reactor coolant system high/low pressure interface boundary. The NRC considers this multiple SDC isolation valve high/low pressure interface issue to be an additional example of the violation as discussed in our letter of March 31, 1999, because of the similarity of the two issues.

After review of this violation example and consultation with the Director, Office of Enforcement, the NRC has concluded that while a violation did occur, enforcement discretion is warranted and issuance of a Notice is not appropriate in this case. Discretion is being exercised pursuant to Section VII.B.3 of the NRC Enforcement Policy because these circuit vulnerabilities were independently identified by your staff as a result of a voluntary initiative; the condition was not likely to have been identified by routine licensee efforts such as a normal surveillance or quality assurance activities and the violation is not reflective of current performance; there had not been prior notice so that FPL should have reasonably identified the violation earlier; FPL's corrective actions were appropriate; and the deficiency was appropriately reported to the NRC.

We will adjust our records accordingly to reflect the above. This letter closes LER 50-389/98-01 and EEI 50-389/99-02-03 and no response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Document Room.

Sincerely,

Original signed by LAR

Luis A. Reyes
Regional Administrator

Docket Nos.: 50-335 and 50-389
License Nos.: DPR-67, NPF-16

cc: see Page 3

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OE/NRR concurrence 05/04/99 per T. Reis (e-mail)

Mchanges noted

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