REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9512260055 DOC.DATE: 95/12/19 NOTARIZED: NO DOCKET #
FACIL:50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co. 05000335
50-389 St. Lucie Plant, Unit 2, Florida Power & Light Co. 05000389
AUTH.NAME AUTHOR AFFILIATION
GOLDBERG,J.H. Florida Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Responds to violations noted in insp repts 50-335/95-20 & 50-389/95-20.Corrective actions:multidiscipline team established to perform comprehensive review of nuclear safety-related relief valve lift & blowdown settings.

DISTRIBUTION CODE: IE01D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 4
TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD2-1 PD	1	1	NORRIS,J	1	1
INTERNAL:	ACRS	2	2	AEOD/DEIB	1	1
	AEOD/SPD/RAB	1	1	AEOD/TTC	1	1
	DEDRO	1	1	FILE CENTER	1	1
	NRR/DISP/PIPB	1	1	NRR/DRCH/HHFB	1	1
	NRR/DRPM/PECB	1	1	NRR/DRPM/PERB	1	1
	NUDOCS-ABSTRACT	1	1	OE DIR	1	1
	OGC/HDS3	1	1	RGN2 FILE 01	1	1
EXTERNAL:	LITCO BRYCE,J H	1	1	NOAC	1	1
	NRC PDR	1	1			

NOTE TO ALL "RIDS" RECIPIENTS:
PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 504-2083) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 20 ENCL 20

Florida Power & Light Company, P.O. Box 128, Fort Pierce, FL 34954-0128

FPL

DEC 19 1995

L-95-333
10 CFR 2.201

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Re: St. Lucie Units 1 and 2
Docket No. 50-335 and 50-389
Reply to Notice of Violation
Inspection Report 95-20 - EA 95-222

Florida Power and Light Company (FPL) has reviewed the subject notice of violation issued on November 28, 1995. Pursuant to 10 CFR 2.201, the response is attached.

On December 1, 1995, the NRC senior resident inspector for St. Lucie notified FPL that the response to this notice of violation was not required to be submitted under oath or affirmation as originally requested by the notice of violation.

Very truly yours,

J. H. Goldberg
President - Nuclear Division

JHG/GRM

Attachment

cc: Stewart D. Ebneter, Regional Administrator, USNRC Region II
Senior Resident Inspector, USNRC, St. Lucie Plant

IE01

Re: St. Lucie Units 1 and 2
Docket No. 50-335 and 50-389
Reply to Notice of Violation
Inspection Report 95-20

Violation EA 95-222

10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected.

Contrary to the above, conditions adverse to quality, involving relief valve setpoint and blowdown values, identified on February 20, March 2, and March 10, 1995, did not receive prompt corrective actions and led to a repeat of previously identified problems on August 10, 1995, when Unit 1 relief valve V-3439 lifted and failed to reseat without operator intervention. The subject event resulted in approximately 4000 gallons of reactor coolant accumulating in the Unit 1 pipe tunnel. Evaluations performed after this event revealed the need to replace, or establish new setpoints for, several relief valves in safety systems in both units.

This is a Severity Level IV violation (Supplement I).

FPL Response

1. The reason for the violation:

The series of relief valve events that occurred in early 1995 took place in different plant systems and involved both St. Lucie Unit 1 and Unit 2. Initial plant efforts to correct these individual plant events were focused on solving the plant system control problems that led to the pressure transients causing the series of relief valve actuation. Briefly, these events are discussed below:

The causes of the Unit 1 and Unit 2 letdown events (between January 23, 1995 and July 8, 1995) were associated with letdown pressure control problems. The corrective actions were focused on the letdown pressure control valve performance.

The cause of the Unit 2 component cooling water relief valve actuation event (February 17, 1995) was a test configuration problem. At the time of the NRC inspection for the subject inspection report, a system transient test was being developed to evaluate the configuration problem.

The cause of the Unit 1 shutdown cooling suction relief event (February 27, 1995) was a flow initiated pressure transient. The corrective action was the implementation of a procedure change which mitigates the potential for pressure transients while placing shutdown cooling in service. Long term corrective actions are discussed in paragraph 2.D.

The cause of the Unit 1 shutdown cooling discharge relief (V3439) event (August 10, 1995) was identified as a design lift and blowdown setpoint problem. Once the relief lifted, it did not reseat without operator intervention to isolate the affected portion of the system. The corrective actions were to replace the valve V3439 and to increase the relief valve lift setpoint and to reduce the blowdown setting thereby providing additional operating margin.

These individual events did not appear to share a common root cause and corrective actions to resolve these individual problems were promptly initiated by plant management.

A generic relief valve setpoint concern was identified by the Operations Supervisor on March 2, 1995 (following the February 27, 1995 event), and was assigned to Mechanical Maintenance for resolution. Between March and August of 1995, Maintenance focused on developing three corrective actions: 1) a new relief valve test bench, 2) revisions to valve test procedures, and 3) improved maintenance training. Maintenance had not considered a design problem with relief valve setpoints and, therefore, efforts were directed toward verifying that the relief valves could be set in accordance with plant design.

The underlying root cause for the series of relief valve events -- lack of design integration between system operating pressures and relief valve reseat pressures -- was not evident until the St. Lucie Unit 1 shutdown cooling discharge relief event (August 10, 1995). At that time, the Engineering Department established a multi-disciplined team to investigate safety-related relief valve lift and reseat settings.

The St. Lucie Action Request (STAR) process was a contributing factor to the delay in finding the underlying root cause of the events. The STAR process relied on series assignments for actions and did not lend itself to parallel investigations or corrective actions.

2. The corrective steps that have or will be taken and the results achieved:

A. The corrective actions taken to address the specific problem of safety related relief valve lift and blowdown settings and control of relief valve design information were provided in the Unit 1 Licensee Event Report (LED) 95-06, and at the pre-decisional enforcement conference on November 14, 1995.

B. In August 1995, a multi-discipline team was established to perform a comprehensive review of the St. Lucie Unit 1 and Unit 2 nuclear safety related relief valve lift and blowdown settings. The team was composed of personnel from Maintenance, Operations, Plant System & Component Engineering, and Nuclear Engineering. A total of 114 relief valves were reviewed (53 for Unit 1 and 61 for Unit 2) and their design settings were evaluated relative to system operating and transient pressures. Seventeen of these valves required additional analysis. Corrective actions, except as noted in 2.D below, have been taken to increase the margin between system operating pressures and the lift/reseat setting, where appropriate.

C. Unit 1 relief valve modifications, with the exception of the shutdown cooling suction overpressure relief valves, V3468 and V3483, were implemented prior to the October 1995 startup, following the shutdown related to Hurricane Erin.

D. Unit 1 shutdown cooling suction overpressure relief valves, V3468 and V3483, lift settings were adjusted to improve the lift margin prior to the October 1995 startup. With these revised lift settings, shutdown cooling can be initiated without challenging these relief valves. The lift and blowdown settings will be further modified during the Spring 1996 refueling outage.

E. Unit 2 relief valve modifications were implemented during the Fall 1995 refueling outage.

3. The corrective steps taken or planned to avoid further violations:

A. FPL Maintenance Specification SPEC-M-038, *Safety Related Relief Valve Setpoints St. Lucie Units 1 and 2*, was issued in November 1995 to institutionalize the results of the relief valve design review team.

B. The STAR process was modified to facilitate parallel department assignments for the evaluation and correction of deficiencies.

4. The date when full compliance will be achieved:

A. The STAR process procedure was modified in October 1995.

B. Full compliance for the relief valve settings will be achieved during the Spring 1996 refueling outage.