NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NUMBER 50-335

FILE NUMBER INCIDENT REPORT

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO:
Mr. Norman C. Moseley

FROM:
Florida Power & Light Company
Miami, Fla.
A. D. Schmidt

DATE OF DOCUMENT
5/13/77

DATE RECEIVED
6/13/77

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PROP

INPUT FORM

NUMBER OF COPIES RECEIVED
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DESCRIPTION

ACKNOWLEDGED

DO NOT REMOVE (1-P)

PLANT NAME:
St. Lucie Unit No. 1

RJL 6/14/77

ENCLOSURE

Licensee Event Report (RO 50-335/77-19) on 4/14/77 concerning RCS Cold Leg Temperature.

(2-P)

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED SEND DIRECTLY TO KREGER/J. COLLINS

FOR ACTION/INFORMATION

BRANCH CHIEF:	ZIEMANN
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ACRS 16 CYS ~~HOLDING~~/SENT	AS CAT B

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EXTERNAL DISTRIBUTION

LPDR:	FT. PIERCE FLA.
TIC:	
NSIC:	

CONTROL NUMBER

771660028

AD 4

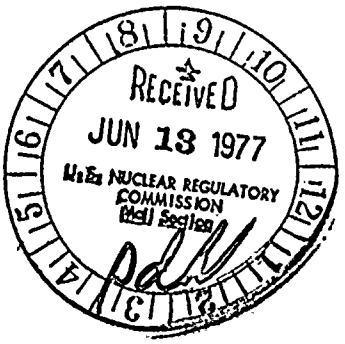
6D

P. O. BOX 013100, MIAMI, FL 33101

FLORIDA POWER & LIGHT COMPANY

May 13, 1977

PRN-LI-77-145



Mr. Norman C. Moseley, Director, Region II
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
230 Peachtree Street, N. W., Suite 1217
Atlanta, Georgia 30303

Dear Mr. Moseley:

REPORTABLE OCCURRENCE 335-77-19
ST. LUCIE UNIT 1
DATE OF OCCURRENCE: APRIL 14, 1977

RCS COLD LEG TEMPERATURE

The attached Licensee Event Report is being submitted in accordance with Technical Specification 6.9 to provide 30-day notification of the subject occurrence.

Very truly yours,

A. D. Schmidt
Vice President
Power Resources

MAS/cpc

Attachment

cc: Robert Lowenstein, Esquire
Director, Office of Inspection and Enforcement (30)
Director, Office of Management Information and
Program Control (3)

771660028

LICENSEE EVENT REPORT

CONTROL BLOCK: [ ] (1–6)

(PLEASE PRINT ALL REQUIRED INFORMATION)

	LICENSEE NAME	LICENSE NUMBER	LICENSE TYPE	EVENT TYPE
01	FLSLS1	00-00000-00	41111	03
(7–8)	(9–14)	(15–25)	(26–30)	(31–32)

	CATEGORY	REPORT TYPE	REPORT SOURCE	DOCKET NUMBER	EVENT DATE	REPORT DATE
01 CONT		L	L	050-03355	041477	050677
(7–8)	(57–58)	(59)	(60)	(61–68)	(69–74)	(75–80)

EVENT DESCRIPTION

02 During normal plant operation, power from the SUPS was lost due to a blown inverter
03 fuse. This caused a shift of turbine control from the automatic mode to the turbine
04 manual mode. The SUPS was immediately re-energized from a SOLA transformer and control
05 power restored. Turbine control was then returned to automatic. Upon transferring to
06 automatic control, the computer automatically began a transfer from sequential valve

	SYSTEM CODE	CAUSE CODE	COMPONENT CODE	PRME COMPONENT SUPPLIER	COMPONENT MANUFACTURER	VIOLATION
07	HA	B	INSTRU	0	W1210	N
(7–9)	(10)	(11)	(12–17)	(43)	(44–47)	(48)

CAUSE DESCRIPTION

08 The RCS temperature changes were caused by steam flow changes which occurred while auto-
09 matically transferring turbine valve control mode. This transfer was not as smooth as
10 required due to minor inaccuracies in the characteristic curves for sequential valve

	FACILITY STATUS	% POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION
11	E	090	NA	a	NA
(7–8)	(9)	(10–12)	(13–44)	(45)	(46–80)

	FORM OF ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY	LOCATION OF RELEASE
12	Z	Z	NA	NA
(7–8)	(9)	(10)	(11–44)	(45–80)

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION
13	000	Z	NA
(7–8)	(9–11)	(12)	(13–80)

PERSONNEL INJURIES

	NUMBER	DESCRIPTION
14	000	NA
(7–8)	(9–11)	(12–80)

PROBABLE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

	TYPE	DESCRIPTION
16	Z	NA
(7–8)	(9)	(10–80)

PUBLICITY

17 NA

ADDITIONAL FACTORS

18 See Page 2 for continuation of Event Description and Cause Description.

19

NAME: M. A. Schoppman PHONE: 305/552-3802

EVENT DESCRIPTION (Continued)

control to single valve control. This mode transfer resulted in a steam flow change which caused RCS cold leg temperature to exceed 542°F. RCS cold leg temperature was immediately reduced to less than 542°F as specified by Technical Specification 3.2.5.a.

This was the fourth occurrence during which T_{cold} exceeded 542°F during the transfer of turbine control mode. Two of them occurred during turbine valve testing (335-77-1 and 335-77-8) and one occurrence involved a similar loss of the SUPS (335-77-13).

Corrective action had been taken due to the previously reported occurrence. New characteristic curves for sequential valve control and single valve control were obtained from the vendor and set into the turbine control system. However, the new curves did not produce the required results, and are currently being re-evaluated by the vendor. Until the revised curves become available, a letter has been promulgated to appropriate plant personnel emphasizing that when restoring the power for turbine control, the computer will automatically transfer control to the single valve mode, and that if the transfer is made with the feedback loops in service, it will be significantly smoother (335-77-19).

CAUSE DESCRIPTION (Continued)

control and single valve control which have been set into the turbine control system.