



April 21, 1977

PRN-LI-77-118

Central File

50-335

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 335-77-22
ST. LUCIE UNIT 1
DATE OF OCCURRENCE: APRIL 8, 1977

ATMOSPHERIC STEAM DUMPS

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

Very truly yours,

A. D. Schmidt
A. D. Schmidt
Vice President
Power Resources

MAS/cpc

Attachment

cc: Robert Lowenstein, Esquire
Director, Office of Inspection and Enforcement (40)
Director, Office of Management Information and
Program Control (3)

AO 4
60

CONTROL BLOCK: 1 2 3 4 5 6

[PLEASE PRINT ALL REQUIRED INFORMATION]

LICENSEE NAME						LICENSE NUMBER										LICENSE TYPE					EVENT TYPE				
01	F	L	S	L	S	1	0	0	-	0	0	0	0	0	-	0	0	4	1	1	1	1	0	1	
8	9					14	15											25	26				30	31	32

CATEGORY		REPORT TYPE	REPORT SOURCE	DOCKET NUMBER					EVENT DATE					REPORT DATE										
01	CONT	T	L	0	5	0	-	0	3	3	5	0	4	0	8	7	7	0	4	2	2	7	7	
8		57	58	59	60	61					68	69						74	75					80

EVENT DESCRIPTION

02	Design studies have shown that the installed atmospheric steam dump valves do not meet																							80
03	the criteria of FSAR section 10.3.2 for cooldown to the shutdown cooling window. This																							80
04	would present a problem only in the unlikely event that offsite power is unavailable for																							80
05	an extended period of time, thereby removing the main condenser as the normal heat sink.																							80
06	Under such conditions, cooldown to the shutdown cooling window can be achieved by																							80

SYSTEM CODE		CAUSE CODE		COMPONENT CODE					PRIME COMPONENT SUPPLIER	COMPONENT MANUFACTURER			VIOLATION		
07	H	J	B	V	A	L	V	E	X	A	W	2	5	5	N
8	9	10	11	12					17	43	44			47	48

CAUSE DESCRIPTION

08	The cause of this occurrence was a design error in the sizing of the atmospheric steam																							80
09	dump valves (2 valves). Corrective actions being considered are: (1) increase the																							80
10	size of the valve internals, (2) replace the present valves with larger valves, and																							80

FACILITY STATUS		% POWER			OTHER STATUS			METHOD OF DISCOVERY		DISCOVERY DESCRIPTION				
1	G	0	0	0	NA			c	Engineering Design Review					
8	9	10	11	12	13			44	45	46				80

FORM OF ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY					LOCATION OF RELEASE				
2	Z	Z	NA					NA					
8	9	10	11					44	45				80

PERSONNEL EXPOSURES					
NUMBER	TYPE	DESCRIPTION			
03	0	0	0	Z	NA
8	9	11	12	13	

PERSONNEL INJURIES				
NUMBER	DESCRIPTION			
4	0	0	0	NA
8	9	11	12	

PROBABLE CONSEQUENCES	
5	NA
8	9

LOSS OR DAMAGE TO FACILITY		
TYPE	DESCRIPTION	
6	Z	NA
8	9	10

PUBLICITY	
7	NA
8	9

ADDITIONAL FACTORS																								
8	See Page Two for continuation of Event Description and Cause Description.																							80
9																								80

REPORTABLE OCCURRENCE 335-77-22
LICENSEE EVENT REPORT
PAGE TWO

EVENT DESCRIPTION (Continued)

augmenting the relieving capacity of the atmospheric steam dumps as described in the Cause Description. This is the first reportable occurrence at St. Lucie Unit 1 involving a deficiency in the steam dump capability.

(335-77-22)

CAUSE DESCRIPTION (Continued)

(3) re-evaluate the design of the Shutdown Cooling System (SDC) to determine if transition to SDC can take place at a higher temperature. Until the atmospheric steam dump capacity deficiency is corrected, the following interim procedures have been instituted: (1) upon loss of offsite power with 116,000 gallons in the condensate storage tank, immediately commence boration and cooldown, (2) when cooling down concurrent with a loss of offsite power, use the secondary steam dump system at about 400 F RCS temperature when condensate storage tank level is below 116,000 gallons, and (3) administratively maintain condensate storage tank level at or above 210,000 gallons to minimize the need to use the secondary steam dump system. A followup report will be submitted when the final corrective action has been determined.