NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | LICENSEE CODE: F L C R P 3 (2) | LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) | LICENSE TYPE: 4 1 1 1 1 (4) | CAT (5)

CON'T 01 | REPORT SOURCE: L (6) | DOCKET NUMBER: 0 5 0 - 0 3 0 2 (7) | EVENT DATE: 1 0 1 4 8 2 (8) | REPORT DATE: 1 0 2 8 8 2 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 On October 14, 1982, Dresser Ind. confirmed to Florida Power Corp. that,
03 based on the EPRI safety valve test program, the pressurizer code safety valves,
04 RCV-8 and RCV-9, may have ring settings that would cause the valves to
05 chatter or fail to attain their rated lift (T.S.3.4.3.1.). Ring settings for
06 RCV-8 allow 50 to 100 percent rated lift. Ring settings for RCV-9 are unknown.
07 There was no effect on public health or safety. This is the first report for
08 RCV-8 and RCV-9 under T.S.3.4.3.1.

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
09	C J (11)	B (12)	C (13)	V A L V E X (14)	X (15)	B (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 2	—	0 6 2	/	0 1	T	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
C (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	N (25)	D 2 4 3 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 This event was caused by inadequate understanding of the operation of
11 these relief valves. Prior to the EPRI report, analysis showed that ring
12 setting did not significantly effect valve operation, thus upper ring setting
13 on RCV-8 and ring settings on RCV-9 were not recorded. On October 22, 1982,
14 RCV-8 and RCV-9 were replaced with valves with appropriate ring settings.

15 | FACILITY STATUS: G (28) | % POWER: 0 0 0 (29) | OTHER STATUS (30): n/a | METHOD OF DISCOVERY: D (31) | DISCOVERY DESCRIPTION (32): Vender Notification

16 | ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): n/a | LOCATION OF RELEASE (36): n/a

PERSONNEL EXPOSURES

17 | NUMBER: 0 0 0 (37) | TYPE: Z (38) | DESCRIPTION (39): n/a

PERSONNEL INJURIES

18 | NUMBER: 0 0 0 (40) | DESCRIPTION (41): n/a

LOSS OF OR DAMAGE TO FACILITY (43)

19 | TYPE: Z (42) | DESCRIPTION: n/a

PUBLICITY

20 | ISSUED: N (44) | DESCRIPTION (45): n/a | NRC USE ONLY

NAME OF PREPARER: P.G. Hughes PHONE: (904)795-6486

SUPPLEMENTARY INFORMATION

REPORT NO: 50-302/82-062/01T-0

FACILITY: Crystal River Unit #3

REPORT DATE: October 28, 1982

OCCURRENCE DATE: October 14, 1982

IDENTIFICATION OF OCCURRENCE:

Pressurizer Code Safety Valves, RCV-8 and RCV-9 may have been in a condition which would prevent them meeting FSAR relief capacity assumptions.

CONDITIONS PRIOR TO OCCURRENCE:

MODE 1 (POWER OPERATION)

DESCRIPTION OF OCCURRENCE:

Since the issuance of EPRI PWR and Relief Valve Test Report, April 1982, Florida Power Corporation (FPC) has been conducting an engineering evaluation to determine if the Crystal River Unit 3 pressurizer code safety valves would perform as intended. The EPRI test data for specific Dresser code safety valves indicates that for certain ring settings, the valve may not achieve full capacity depending on the value of the developed back pressure.

In an attempt to determine code safety valve performance, FPC initiated an analysis by Babcock and Wilcox (B&W). The B&W report dated October 12, 1982 indicated that the ring settings for RCV-8 (incorrectly identified as RCV-9) correspond to a capacity between 50% to 100% full flow. FPC could not provide documentation of the ring settings for RCV-9 (incorrectly identified in the report as RCV-8) and, therefore, B&W could not make any quantifiable statement of the expected valve performance. The analysis done by B&W, assuming complete RCV-9 failure, found that RCV-8 was sufficient to assure plant safety above 15% full power. Below 15% full power, adequate safety margin was maintained due to the low probability of a safety valve challenge. Following this analysis, B&W and FPC agreed to contact Dresser Industries to obtain any further input on the validity of the EPRI test with respect to the Dresser code safety valves.

After an FPC query, on October 14, 1982, Dresser responded that they concurred with the EPRI test results and recommended conclusive determination of the code safety valve ring settings.

During the unplanned outage that began on October 14, 1982, RCV-8 and RCV-9 were replaced with valves which have appropriate ring settings as determined by the EPRI test program. On October 22, 1982, RCV-8 and RCV-9 were returned to service. The code safety valves that were removed will be sent to Wyle Labs to check the ring settings and to be refurbished.

DESIGNATION OF APPARENT CAUSE:

This event was caused by inadequate understanding of the impact of ring settings on valve performance. The original design of the valves assumed that the ring

settings did not significantly affect valve operation, thus the ring settings were not considered design parameters and acceptance criteria/records of settings were, therefore, not required.

ANALYSIS OF OCCURRENCE:

There was no effect on public health or safety. RCV-8 alone was sufficient to handle moderate frequency events above 15% full power. The probability of code safety valve challenges below 15% power is considered to be sufficiently low to assure safe operations.

CORRECTIVE ACTION:

RCV-8 and RCV-9 have been replaced with valves which have appropriate ring settings as determined by the EPRI test program.

FAILURE DATA:

This is the first occurrence for RCV-8 and RCV-9 under Technical Specification 3.4.3.1.