

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8102180493 DOC. DATE: 81/02/12 NOTARIZED: NO DOCKET #
 FACIL: 50-261 H. B. Robinson Plant, Unit 2, Carolina Power and Light 05000261
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 RECIP. NAME: RECIPIENT AFFILIATION: Region 2, Atlanta, Office of the Director

SUBJECT: LER 81-005/01T-0: on 810129, spurious safeguards actuation & reactor trip resulted from high steam flow spike. Probable cause was valve CVCS-200E vibrating open & pipe cap failing to hold following safety injection. Valve secured.

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 TITLE: Incident Reports

NOTES:

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	A/D MATL & QU08		1	1	A/D OP REACT009		1	1
	A/D PLANT SYS10		1	1	A/D RAD PROT 11		1	1
	A/D SFTY ASSE12		1	1	ACC EVAL BR 14		1	1
	AE0D		3	3	ASLBP/J. HARD		1	1
	AUX SYS BR 15		1	1	CHEM ENG BR 16		1	1
	CONT SYS BR 17		1	1	CORE PERF BR 18		1	1
	DIR, DIV OF LIC		1	1	DIR, ENGINEER I20		1	1
	DIR, HUM FAC S21		1	1	DIR, SYS INTEG22		1	1
	EFF TR SYS BR23		1	1	EQUIP QUAL BR25		1	1
	GEOSCIENCES 26		1	1	I&C SYS BR 29		1	1
	I&E 05		2	2	JORDAN, E./IE		1	1
	LIC GUID BR 30		1	1	MATL ENG BR 32		1	1
	MECH ENG BR 33		1	1	MPA		3	3
	NRC PDR 02		1	1	OP EX EVAL BR34		3	3
	OR ASSESS BR 35		1	1	POWER SYS BR 36		1	1
	RAD ASSESS BR39		1	1	REACT SYS BR 40		1	1
	REG FILE 01		1	1	REL & RISK A 41		1	1
	SFTY PROG EVA42		1	1	STRUCT ENG BR44		1	1
	SYS INTERAC B45		1	1				
EXTERNAL:	ACKS	46	16	16	LPDR	03	1	1
	NSIC	05	1	1	TERA: DOUG MAY		1	1

FEB 19 1981

SUPPLEMENTAL INFORMATION

FOR

LICENSEE EVENT REPORT 81-005

1. Cause Description and Analysis:

On January 29, 1981, at 0541 hours, a load reduction was initiated to reach a hot standby condition to allow repair of a turbine E-H system oil leak. At 0624 hours, immediately following opening of the generator output breakers, a governor valve spiked open, apparently due to the E-H problems, causing the high steam flow bi-stables to momentarily operate. This momentary high steam flow signal with the low Tavg signal (<543543oF) caused "B" train of safeguards to initiate. It has been concluded that the high steam flow signal spike was of insufficient duration to fully latch the "A" train of safeguards. "A" train was manually initiated at 0625 hours. With conditions appearing normal, the SI was reset at 0627 hours. The low pressure letdown was restored at 0635 hours and the reactor coolant system pressure began decreasing with the containment pressure and dew point increasing. The letdown was secured at 0650 hours. At this time, the containment sump level monitor indicated approximately 3000 gallons in the containment sump. Pressure continued to decrease until at 0705 hours, a "Low Pressurizer Pressure" safety injection was received with both trains operating normally. The RCS pressure decrease was determined to be caused by a leaking pressurizer spray valve and was corrected by stopping the reactor coolant pumps associated with the spray. The pressurizer pressure immediately started to increase and normal control of reactor coolant pressure was re-established.

Upon containment entry, valve CVCS-200E, a letdown line drain valve, size 3/4 inch, was found to be leaking slightly (approximately 5-7 GPM). Letdown was isolated at this time but apparently some leakage occurred through the air operated letdown isolation valves. The leak was later stopped by shutting the valve. The leak rate could not be accurately determined but it was estimated to have been approximately 100 GPM while letdown was unisolated which exceeds the limit of Technical Specification 3.1.5.2. A total of approximately 4500 to 6000 gallons of water was leaked to the containment sump during the event.

The valve CVCS-200E is a normally closed valve with a pipe cap on the outlet. It appears the valve had vibrated open during previous operation and the pipe cap which was serving as a pressure boundary, blew off sometime after the initial SI. The leakage was confined to containment so there was no threat to the plant or public health and safety.

2. Corrective Action:

The valve CVCS-200E was closed to stop the leakage of water. The last threads of the valve outlet pipe (damaged when the cap blew off) were dressed and a new pipe cap was installed.

3. Corrective Action To Prevent Further Occurrence:

The valve CVCS-200E, and several other valve/pipe cap arrangements which could be exposed to the same conditions were inspected and physically locked or verified secured in the closed position.

LICENSEE EVENT REPORT

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

0	1	S	C	H	B	R	2	2	0	0	-	0	0	0	0	0	0	0	0	3	4	1	1	1	1	4		5		
7	8	9	LICENSEE CODE					14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57	CAT	58

0	1	L	6	0	5	0	0	0	2	6	1	7	0	1	2	9	8	1	8	0	2	1	2	8	1	9
7	8	REPORT SOURCE		60	61	DOCKET NUMBER						68	69	EVENT DATE					74	75	REPORT DATE					80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On January 29, 1981, at 0624 hours, a spurious safeguards actuation and reactor trip

0 3 were received resulting from a high steam flow spike caused by turbine governor valve/

0 4 E-H oil problems. Shortly thereafter letdown flow was restored and RCS pressure began

0 5 decreasing with containment pressure and dew point increasing. Upon containment entry,

0 6 following letdown isolation a letdown line drain valve (CVCS-200E) was found partially

0 7 opened and leaking through with its pipe end-cap missing. The leak rate with letdown

0 8 unisolated was estimated at approximately 100 GPM which exceeds the limits of Technical

0 9 Specification 3.1.5.2. No uncontrolled release to the environment occurred and there

1 0 was no adverse impact to the general public. This item is reportable pursuant to

1 1 Paragraph 6.9.2.a(2) of the Unit Technical Specifications.

0	9	P	C	11	E	12	B	13	P	I	P	E	X	X	14	A	15	Z	16
7	8	9	SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE						COMP. SUBCODE		VALVE SUBCODE		

17	8	1	0	0	5	0	1	T	0
LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE	
21	22	23	24	25	26	27	28	29	30

A	X	C	Z	0	0	0	Y	N	A	E	0	6	5				
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The valve CVCS-200E is a normally closed drain valve with a pipe cap on the outlet.

1 1 Probable cause is attributed to the valve vibrating open and the pipe cap, which was

1 2 serving as a pressure boundary, failing to hold at sometime following the first SI.

1 3 Approximately 4500-6000 gallons of water leaked to the containment sump during the

1 4 event. As immediate corrective action, letdown was secured. As further corrective

1 5 action the valve was secured in the closed position and a new cap was installed.

1 6 Additionally, other similar valves were locked or verified secured in the closed posi-

1 7 tion to prevent recurrence.

1	5	G	0	0	0	N/A	A	Operator Observation				
7	8	9	FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
10	11	12	13	14	15	16	17	18	19	20	21	

1	6	Z	Z	N/A	N/A			
7	8	9	ACTIVITY CONTENT RELEASED OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE	
10	11	12	13	14	15	16	17	

1	7	0	0	0	Z	N/A		
7	8	9	PERSONNEL EXPOSURES NUMBER		TYPE		DESCRIPTION	
10	11	12	13	14	15	16	17	

1	8	0	0	0	N/A	
7	8	9	PERSONNEL INJURIES NUMBER		DESCRIPTION	
10	11	12	13	14	15	

1	9	Z	N/A			
7	8	9	LOSS OF OR DAMAGE TO FACILITY TYPE		DESCRIPTION	
10	11	12	13	14	15	

2	0	N	N/A	
7	8	9	PUBLICITY ISSUED DESCRIPTION	
10	11	12	13	14

8102180493

NAME OF PREPARER

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