

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 7904160127 DOC. DATE: 79/04/11 NOTARIZED: NO DOCKET #
 FACIL: 50-261 H. B. ROBINSON PLANT, UNIT 2, CAROLINA POWER AND LIGHT 05000261
 AUTH. NAME AUTHOR AFFILIATION
 STARKEY, R.B. CAROLINA POWER & LIGHT CO.
 RECIP. NAME RECIPIENT AFFILIATION
 REGION 2, ATLANTA, OFFICE OF THE DIRECTOR

SUBJECT: LER 79-005/03L-0 ON 790313: WHILE RUNNING "B" BORIC ACID
 TRANSFER PUMP, PUMP TRIPPED DUE TO HIGH TEMP. CAUSED BY
 BROKEN SHAFT, PUMP REBUILT & RETURNED TO SVC.

DISTRIBUTION CODE: A002S COPIES RECEIVED: LTTR 1 ENCL 1 SIZE: 1+2
 TITLE: INCIDENT REPORTS

NOTES:

ACTION:	RECIPIENT ID CODE/NAME	COPIES		RECIPIENT ID CODE/NAME	COPIES	
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	05 BC 6RB 1	4	4			
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	09 I&E	2	2	11 MPA	3	3
	14 TA/EDO	1	1	15 NOVAK/KNIEL	1	1
	16 EEB	1	1	17 AD FOR ENGR	1	1
	18 PLANT SYS BR	1	1	19 I&C SYS BR	1	1
	20 AD PLANT SYS	1	1	21 AD SYS/PROJ	1	1
	22 REAC SAFT BR	1	1	23 ENGR BR	1	1
	24 KREGER	1	1	25 PWR SYS BR	1	1
	26 AD/SITE ANAL	1	1	27 OPERA LIC BR	1	1
	28 ACCIDENT ANALYS	1	1	29 AUX SYS BR	1	1
	E JORDAN/IE	1	1			
EXTERNAL:	03 LPDR	1	1	04 NSIC	1	1
	29 ACRS	16	16			

204
CP

APR 17 1979

LICENSEE EVENT REPORT

(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	3	4	1	1	1	1	4		5		
7	8	LICENSEE CODE						14	15	LICENSE NUMBER										25	26	LICENSE TYPE				30	57	CAT	58	

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0 1 7 8

REPORT SOURCE L 6 0 5 0 0 0 2 6 1 7 0 3 1 3 7 9 8 0 4 1 1 7 9 9

60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During normal operation on March 13, 1979, while running "B" Boric Acid Transfer Pump
0 3 | (BATP) to recirculate the BIT with the BAST as required by PT-2.7, the pump tripped
0 4 | due to high temperature at 2300 hours. The pump was allowed to cool for 28 minutes
0 5 | and was restarted and tested satisfactorily. However, at 1240 hours on April 14, the
0 6 | pump failed due to a broken shaft. Tentative plans are to replace this pump with a
0 7 | more reliable model during the 1979 Refueling Outage. "A" Pump has been changed
0 8 | already. (Technical Specifications 3.2.3.b and 6.9.2.b).

0	9	SYSTEM CODE		P	C	CAUSE CODE	E	CAUSE SUBCODE	B	COMPONENT CODE				P	U	M	P	X	X	COMP. SUBCODE	B	VALVE SUBCODE	Z																														
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32																												
LER 'RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER																									
7		9		0		0		5		/		0		3		L		-		0		A		C		Z		Z		0		0		0		0		Y		Y		N		C		3		0		0		0	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80						

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The "B" BATP failed due to a broken shaft. The pump had tripped about twelve hours
1 1 earlier due to high temperature, which could have contributed to this failure. The
1 2 failed pump was rebuilt and returned to service. "A" Pump was operable during this
1 3 sequence of events, so there was no threat to the health and welfare of the public.
1 4

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

FACILITY STATUS (1) (5) (E) (28) % POWER (1) (0) (0) (29) OTHER STATUS (30) NA METHOD OF DISCOVERY (B) (31) DISCOVERY DESCRIPTION (32) Operator Observation

ACTIVITY CONTENT
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

1 6 Z (33) Z (34) NA NA

7 8 9 10 11 44 45 80

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	(37)	Z	(38)	NA	

							8	9		11	12	13							80	
							PERSONNEL INJURIES													
							NUMBER							DESCRIPTION (41)						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
											(10)							MA		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80																																																																																
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1 9 Z 42 NA 80
7 8 9 10 PUBLICITY NBC USE ONLY

ISSUED		DESCRIPTION		NAC USE ONLY	
2	0	N	44	NA	
7	8	9	10	68	69
				80	

PHONE: (803) 332-1351

SUPPLEMENTAL INFORMATION

FOR

LICENSEE EVENT REPORT 79-05

1. Cause Description and Analysis:

On March 13, 1979, during full-power operation, the monthly test of the Safety Injection System, P.T.-2.7, was being conducted. At 2300 hours, it was noted that the "B" Boric Acid Transfer Pump (BATP) had tripped due to overheating while recirculating the Boron Injection Tank (BIT) with the Boric Acid Storage Tank (BAST). The pump was allowed to cool for 28 minutes and was restarted and tested satisfactorily. However, about 12 hours later at 1240 hours on April 14, the pump failed due to a broken shaft. This sequence of events is being reported as one event due to the time element involved and the possible connections between the occurrences. The performing of PT-2.7 requires several hours of run time on Boric Acid Transfer Pumps because the BIT is recirculated with the BAST after each SI Pump is tested. The "A" BATP was operable during this entire sequence of events. No reason for the overtemperature trip preceeding the shaft failure could be positively determined. When the failed pump was inspected, the stator was also found defective. However, this defect is believed to have resulted from the shaft failure. The shaft failure is believed to be a generic problem with shaft design.

2. Corrective Action:

The "B" Boric Acid Transfer Pump was rebuilt with new components and was tested satisfactorily.

3. Corrective Action To Prevent Further Occurrence:

There have been several failures of this type on the Chempump Model GE-20K. The failed shaft was a standard part from Chempump and had been in service since April 12, 1976. The stator had been in service since January 31, 1977. The "A" BATP has been changed to a Model GVH-10K, which has proven reliable in almost three years of service. Tentative plans are for the "B" Pump to be replaced by a Model GVH-10K during the 1979 Refueling Outage.