

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) H. B. Robinson S.E. Plant										DOCKET NUMBER (2) 0 5 0 0 0 2 6 1 1										PAGE (3) 1 OF 0 2	
TITLE (4) Reactor Trip Low S/G Level Coincident with Steam Flow >Feedwater Flow on "B" S/G.																					
EVENT DATE (5)				LER NUMBER (6)				REPORT DATE (7)				OTHER FACILITIES INVOLVED (8)									
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES					DOCKET NUMBER (S)							
0 3 0	1 8 5	8 5	—	0 1 0	—	0 0	0 3 2	7 8 5						0 5 0 0 0							
OPERATING MODE (9)				THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)																	
POWER LEVEL (10) 0 5 2				20.402(b)				20.406(a)				X 80.73(a)(2)(iv)				83.71(b)					
				20.406(a)(1)(i)				80.36(c)(1)				80.73(a)(2)(v)				83.71(c)					
				20.406(a)(1)(ii)				80.36(c)(2)				80.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)					
				20.406(a)(1)(iii)				80.73(a)(2)(i)				80.73(a)(2)(viii)(A)									
				20.406(a)(1)(iv)				80.73(a)(2)(ii)				80.73(a)(2)(viii)(B)									
				20.406(a)(1)(v)				80.73(a)(2)(iii)				80.73(a)(2)(x)									
LICENSEE CONTACT FOR THIS LER (12)																					
NAME										TELEPHONE NUMBER											
Carson Wright										AREA CODE				8 0 3 3 8 3 - 4 5 2 4							
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																					
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS		
B	S J	F C V	C 6 3 5	Y																	
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)				MONTH		DAY		YEAR			
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO											

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (10)

On March 1, 1985, at 1352 hours, the Plant tripped from 52% power due to the loss of feedflow to "B" Steam Generator (SG). High vibrations at the Feedwater Regulating Valves (FWRV) caused an instrument air line to the "B" FWRV operator to separate. "B" FWRV failed closed, and the Plant tripped on a "low SG level coincident with steam flow (SF) greater than feedwater flow (FF)" reactor trip signal. Improperly designed FWRV internals was the cause of the high vibrations.

Corrective action currently planned is to replace the valve internals with the properly designed internals. In the interim, until the internals can be replaced, a special procedure has been implemented which allows valves in the feedwater system to be throttled in order to reduce the vibrations at the FWRVs.

The FWRV internals will be replaced next refueling outage.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
H. B. Robinson Unit No. 2	05003261	85	010	00	02	OF	02

TEXT (If more space is required, use additional NRC Form 366A's) (17)

On March 1, 1985, while operating at 50% power, the Plant experienced high feedwater line vibrations resulting in Feedwater Regulating Valve (FWRV) oscillations. On a previous load increase, these high vibrations were experienced between 40% and 60% power. In an effort to reduce the vibration, the load was increased. At 1352 hours, with the Plant at 52% power, high vibrations at the FWRVs caused the instrument air line to the "B" FWRV to separate from the valve operator, closing the "B" FWRV. With feedflow lost to "B" Steam Generator (SG), the reactor tripped on a "low SG level coincident with a steam flow greater than feedflow" reactor trip signal.

The flow induced vibration at the FWRVs was caused by incorrect data used to design the valve internals. The actual differential pressure (DP) across the FWRVs, which increased due to numerous secondary system improvements, was approximately 100 psi greater than anticipated.

Interim corrective action has been taken to reduce the flow induced vibrations until the valve internals can be replaced. The 6A and 6B feedwater heaters' outlet gate valves have been throttled to decrease the operating DP across the FWRVs by decreasing the pressure at the FWRV inlet. A special procedure was implemented, including these interim actions, allowing Plant operation with the existing FWRV internals. The FWRV internals are planned to be replaced by the end of the next refueling outage.

Further vibration reduction was also accomplished by increasing the air pressure required to operate the FWRVs from 12 to 18 psi by FWRV spring adjustment.



Carolina Power & Light Company

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Serial: RNP/85-591

United States Nuclear Regulatory Commission
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Washington, D.C. 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
LICENSEE EVENT REPORT 85-010

Dear Sir:

In accordance with 10CFR50.73, Licensee Event Report, the enclosed Licensee Event Report is submitted. This report fulfills the requirements for a written report within (30) days of a reportable event and is in accordance with the format set forth in NUREG-1022, September, 1983.

Very truly yours,

R. E. Morgan
General Manager
H. B. Robinson S. E. Plant

CLW:sr/C-372

Enclosure

cc: INPO
H. E. P. Krug
J. N. Grace

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