

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 1078

FROM: Carolina Power & Light Company Raleigh, N. C. 27602 E. E. Utley		DATE OF DOC: 2-9-73	DATE REC'D: 2-14-73	LTR: X	MEMO	RPT	OTHER
TO: Mr. O'Leary		ORIG: 2	CC	OTHER	SENT AEC PDR <u> x </u> SENT LOCAL PDR <u> x </u>		
CLASS: <u>U</u> PROP INFO		INPUT	NO CYS REC'D: 40		DOCKET NO: 50-261		
DESCRIPTION: Ltr reporting an incident on 12-20-72, in which a leak of approximately one-half gallon per minute was detected inside the containment vessel.....W/Attached Figs 1 & 2.			ENCLOSURES:				
NOTE: *PLEASE CIRCULATE-INSUFFICIENT COPIES RECEIVED FOR FULL DISTRIBUTION PLANT NAMES: H. B. Robinson Unit No. 2			<div style="border: 1px solid black; padding: 10px; text-align: center;"> Do Not Remove ACKNOWLEDGED </div>				

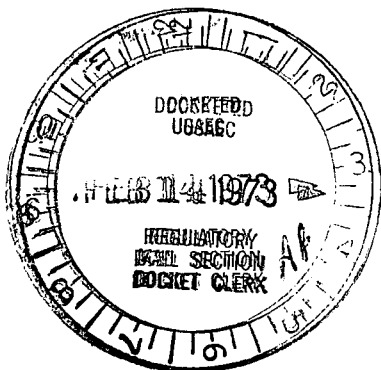
FOR ACTION/INFORMATION		2-14-73	AB
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✓ CASE	KNIGHT(2)	KASTNER	NUSSBAUMER	E. GOULBOURNE	L
GIAMBUSSO	PAWLICKI	BALLARD		A/T IND	
BOYD-L(BWR)	SHAO	SPANGLER	LIC ASST.	BRATTMAN	
✓ DEYOUNG-L(PWR)	✓ KNUTH *		SERVICE L	SALTZMAN	
✓ SKOVHOLT-L	STELLO	ENVIRO	MASON L		
P. COLLINS	MOORE	MULLER	WILSON L	PLANS	
REG OPR	HOUSTON	DICKER	MAIGRET L	MCDONALD	
✓ FILE & REGION (2)	✓ TEDESCO *	KNIGHTON	SMITH L	DUBE	
MORRIS	LONG	YOUNGBLOOD	GEARIN L		
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	BENAROYA		TEETS L	C. MILES	
		REGAN	LEE L		

EXTERNAL DISTRIBUTION

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✓ 1-DTIE(ABERNATHY)	(1)(5)(9)-NATIONAL LAB'S		1-GERALD LELLOUCHE
✓ 1-NSIC(BUCHANAN)	1-R. CARROLL-OC, GT-B227		BROOKHAVEN NAT. LAB
1-ASLB-YORE/SAYRE	1-R. CATLIN, E-256-GT		1-AGMED(WALTER KOESTER,
WOODWARD/H. ST.	1-CONSULANT'S		Rm C-427, GT)
✓ 16-CYS ACRS HOLDING	NEWARK/BLUME/AGABIAN		1-RD...MULLER...F-309GT
SENT TO LIC ASST.			
S. TEETS ON 2-14-73			



Regulatory

Cy.

CP&L

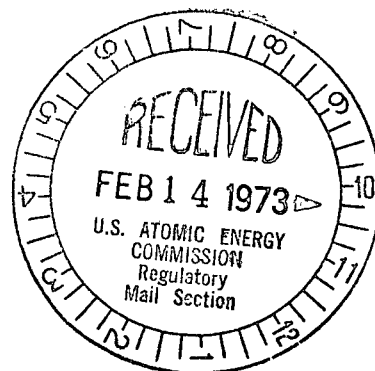
Carolina Power & Light Company

February 9, 1973

Mr. John F. O'Leary, Director
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

50 - 261

H. B. ROBINSON UNIT NO. 2
LICENSE DPR-23
LEAK IN FEEDWATER SYSTEM



Dear Mr. O'Leary:

In accordance with paragraph 6.6.3 Technical Specifications, the circumstances associated with repairing weld leaks in the feedwater system are reported.

On December 20, 1972, a leak of approximately one-half gallon per minute was detected inside the containment vessel. The leak was in the joint where the "B" auxiliary feedwater pipe (4-FW-23) joins the "B" main feedwater pipe (16-FW-10) (Figure 1). The unit was shut down on December 21, 1972, a repair effected on December 22, 1972 and the unit returned to service on December 23, 1972.

The repair made on December 22, 1972 consisted of plug welding a drilled hole in the weld saddle. At the time, it was thought that the hole was a construction error that had not been properly repaired. Further investigation into the cause of the leak raised questions concerning the correctness of the repairs. It was determined that the drilled hole was a telltale vent hole in the weld saddles and that a leak through the vent hole indicated that the pressure boundary weld was leaking. Furthermore, welding up the vent hole had resulted in the saddle welds becoming the pressure boundary. Ebasco, the architect engineer during construction, and B. F. Shaw Co., the fabricator of the feedwater pipe sections, were consulted and agreed that the saddle welds were not designed as a pressure boundary. Both recommended that a repair to the pressure boundary weld, under the saddle, be made. It was also determined that approximately one year ago an identical improper weld repair had been made on the "A" feedwater piping.

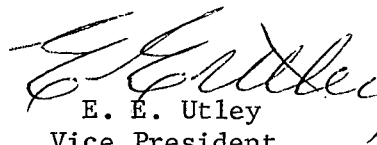
The plant was shut down on January 4, 1973 to make repairs to the pressure boundary welds on A and B feedwater piping. The Plant Nuclear Safety Committee had met to discuss the situation in detail and had recommended that appropriate repairs be made to the pressure boundary welds. It was also determined that the joint design on "C" feedwater piping was not similar to "A" and "B".

February 9, 1973

The repair consisted of grinding out the original shop welds and rewelding the pressure boundary (Figure 2). A B. F. Shaw Co., engineer was engaged to provide technical direction to the welding, inspection and heat treating of the affected piping. The plant was returned to power on January 9, 1973 after the repairs had been reviewed by the Plant Nuclear Safety Committee.

The leaks in the pressure boundary welds were caused by small cracks in the welds. These cracks could have been caused by a combination of vibration, thermal shock, or small defects in the original welds. It is the opinion of the Plant Nuclear Safety Committee, Ebasco engineers, and B. J. Shaw engineers that the weld repair has improved the strength of the joint above the original weld. Ebasco is conducting a thorough engineering study of the weld failure to determine the cause of the original failure and to determine if additional steps are required to prevent recurrence. Should this study indicate that additional changes are prudent, they will be accomplished during the refueling outage beginning in mid-March, 1973.

Very truly yours,


E. E. Utley
Vice President
Bulk Power Supply

NBB/za

Enclosures

cc: Mr. C. D. Barham
Mr. N. B. Bessac
Mr. B. J. Furr
Mr. D. V. Menscer

AUXILIARY TO MAIN FEEDWATER CONNECTION
(ORIGINAL)

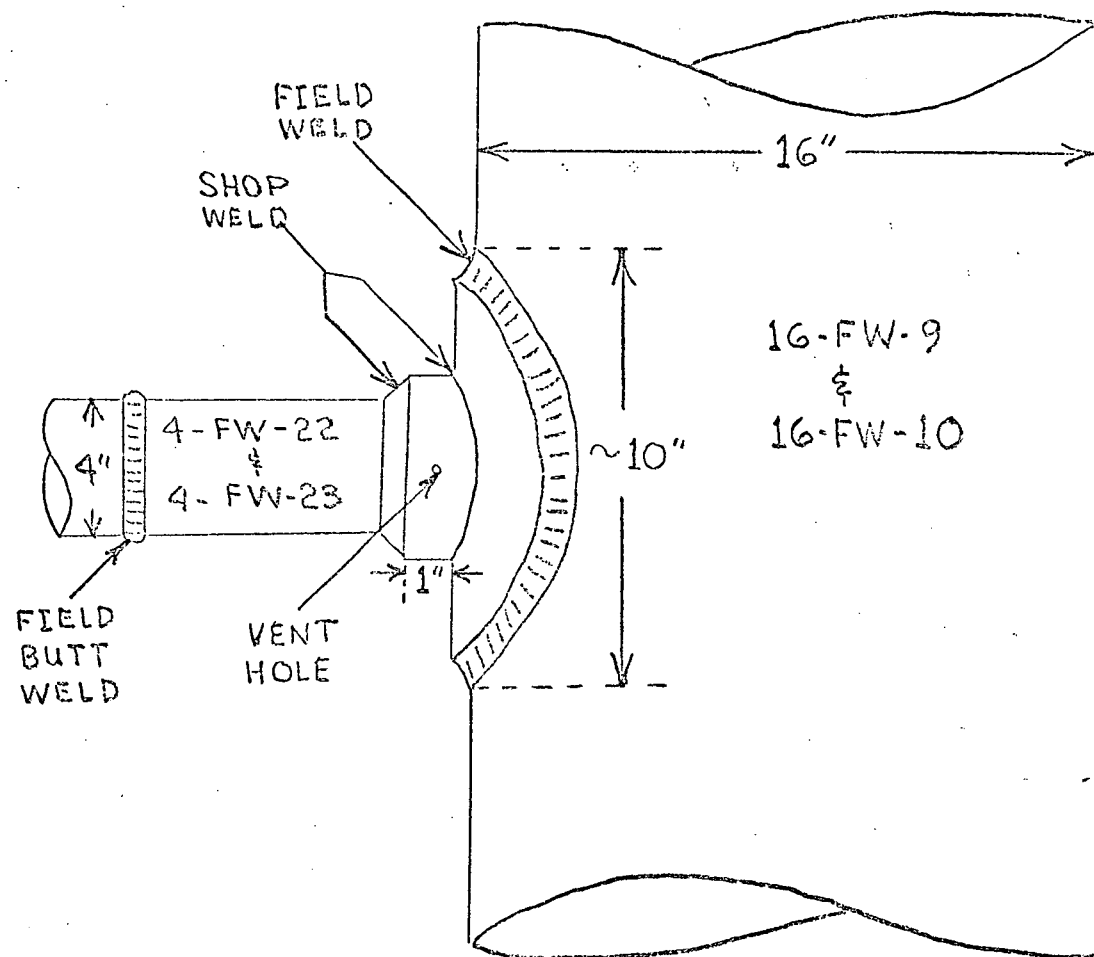


FIGURE 1

AUXILIARY TO MAIN FEEDWATER CONNECTION
(REPAIRED)

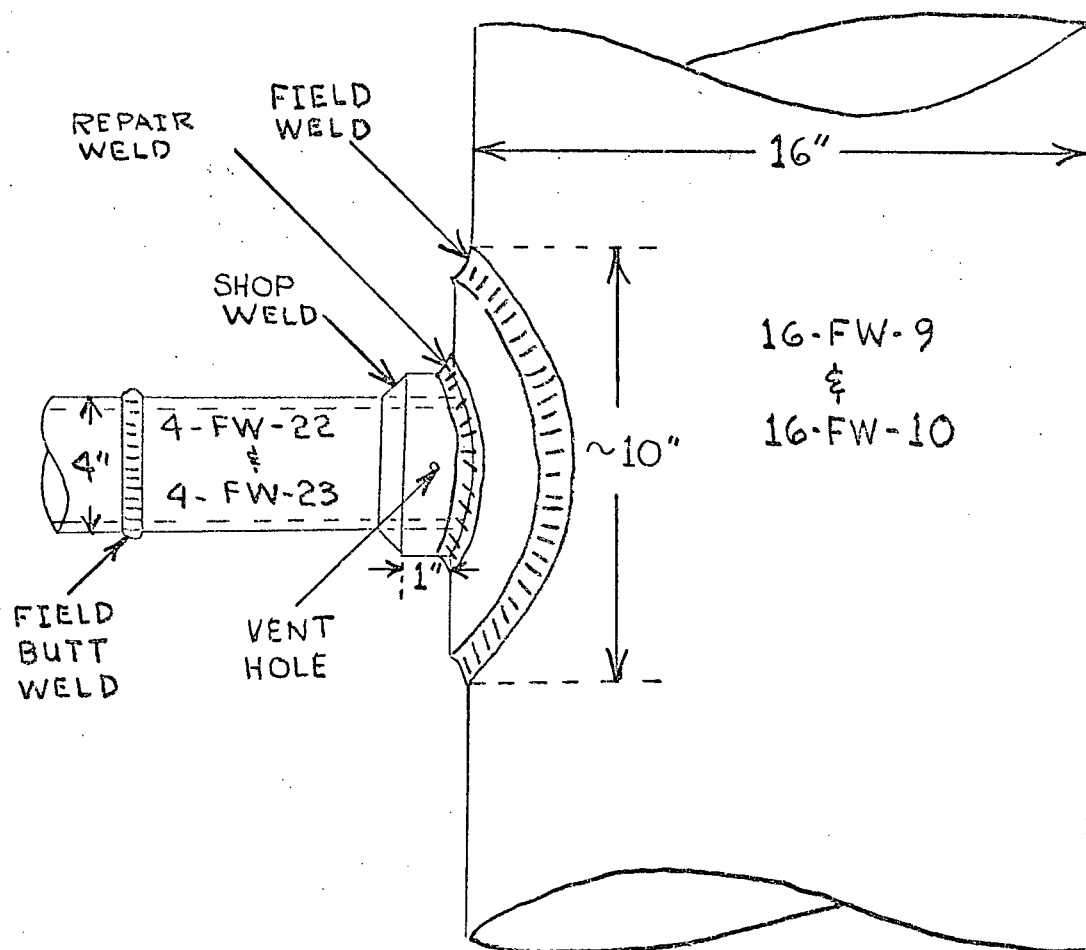


FIGURE 2