

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9011270030 DOC. DATE: 90/11/16 NOTARIZED: NO DOCKET #
 FACIL: 50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
 AUTH. NAME AUTHOR AFFILIATION
 DIETZ, C.R. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 Office of Nuclear Reactor Regulation, Director (Post 870411 R

SUBJECT: Part 21 rept re defect in safety injection sys accumulators I
 mfg by Delta Southern Co. D

DISTRIBUTION CODE: IE19D COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 2 S
 TITLE: Part 21 Rept (50 DKT) S

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES		
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME		LTTR	ENCL	
	PD2-1 LA		1	0		PD2-1 PD		1	1	A
	LO, R		1	1						D
INTERNAL:	AEOD/DSP/TPAB		1	1		NRR/DOEA/OGCB11		2	2	D
	NRR/DRIS/RVIB9D		1	1		REG FILE 01		1	1	S
	RES/DSIR/EIB		1	1		RGN1		1	1	
	RGN2		1	1		RGN3		1	1	
	RGN4		1	1		RGN5		1	1	
EXTERNAL:	INPO RECORD CTR		1	1		NRC PDR		1	1	
	NSIC SILVER, E		1	1						

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 17 ENCL 160

FAI
WV



Carolina Power & Light Company

ROBINSON NUCLEAR PROJECT DEPARTMENT
POST OFFICE BOX 790
HARTSVILLE, SOUTH CAROLINA 29550

NOV. 16 1990

File No: 13520

Serial: RNP/90-3793

Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Carolina Power & Light Company
H. B. Robinson Unit 2, Docket No. 50-261, License No. DPR-23
10CFR21 Report, Delta Southern Company Accumulators

Gentlemen:

In accordance with the requirements of 10 CFR 21.21 Carolina Power & Light Company (CP&L) hereby provides notification of the existence of a defect in the three safety injection system accumulators for the H. B. Robinson Unit 2 Steam Electric Plant (HBR2). The accumulators which are original plant equipment, were manufactured by Delta Southern Company and supplied to CP&L by Westinghouse Electric Corporation.

The reportable defect has been determined to be that actual material supplied deviated from what was indicated on quality assurance records for the three accumulators. Specifically, the quality assurance data packages indicate that the couplings were supplied as SA182 Type 304 ELC (Extra Low Carbon) Stainless Steel. Metallurgical analysis of a total of 27 couplings, nine per accumulator, indicated that 13 had a carbon content in excess of the maximum for a low carbon Type 304 Stainless Steel. These results support a conclusion that at least some of the nozzle couplings on the accumulators were supplied using a standard Type 304 Stainless Steel material. In that the tanks were post weld stress relieved at 1150°F, it is assumed that the Standard Type 304 Stainless Steel couplings are now in a sensitized condition which would render them susceptible to intergranular stress corrosion cracking (IGSCC) under conditions of tensile stresses and contaminants associated with IGSCC. IGSCC has, in fact, been found on the accumulators at HBR2, resulting in two instances of through-wall cracks. Such cracks, if they propagate to complete failure of the nozzle during design basis accident conditions, could lead to loss of the accumulator safety function. Loss of more than one accumulator in a design basis accident scenario would create a substantial safety hazard.

9011270030 901116
PDR ADOCK 05000261
S FDC

IE19
1/0

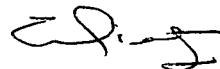
CP&L has discussed this situation with Westinghouse Electric Corporation and concluded on November 14, 1990 that it is appropriate for CP&L to make a report in accordance with 10 CFR 21.21.

Regarding the number and location of safety related tanks manufactured by Delta Southern Company which may contain the subject defect, CP&L can only be certain of the existence of susceptible tanks at the HBR2 facility. Investigation has shown that the only such safety related tanks are the three accumulators. Two nozzles identified with IGSCC are being replaced in accordance with ASME Code requirements. Other potentially susceptible nozzles have been examined via ultrasonic nondestructive examination technique; two additional indications were identified, which are also being repaired. These corrective actions undertaken by CP&L during the current refueling outage, will be complete prior to returning the plant to service, currently scheduled for January 15, 1991.

CP&L has shared information on the subject defect with Westinghouse Electric Corporation; however, without specific knowledge of other purchasers or licensees which may have susceptible tanks, CP&L at this time is unable to share specific information on the defect with any such organizations. It should be noted that while CP&L cannot be certain about the supplier of equipment to other facilities, Purchase Order records provided to CP&L by Westinghouse, indicate that similar tanks may have been supplied to the Florida Power & Light Company (FP&L) Turkey Point Facility. CP&L has had informal discussions with FP&L on this subject.

If you have any questions regarding information in this report, please contact Mr. J. D. Kloosterman at (803) 383-1491.

Very Truly Yours,



Charles R. Dietz
Manager

Robinson Nuclear Project Department

JDK:gmb

cc: R. Lo
S. Ebnetter
L. Garner
Document Control Desk