

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9008090101    DOC.DATE: 90/08/03    NOTARIZED: NO    DOCKET # 05000400  
 FACIL: 50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina  
 AUTH.NAME                      AUTHOR AFFILIATION  
 LOFLIN, L.I.                    Carolina Power & Light Co.  
 RECIP.NAME                      RECIPIENT AFFILIATION  
    Document Control Branch (Document Control Desk)

SUBJECT: Forwards addl info re operator action times assumed in steam generator tube rupture analyses for plant, per 900712 telcon.

DISTRIBUTION CODE: A001D    COPIES RECEIVED: LTR 1 ENCL 1    SIZE: 2  
 TITLE: OR Submittal: General Distribution

NOTES: Application for permit renewal filed. 05000400

	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL
	PD2-1 LA BECKER, D	1 5	1 5	PD2-1 PD	1	1
INTERNAL:	ACRS	6	6	NRR/DET/ECMB 9H	1	1
	NRR/DOEA/OTSB11	1	1	NRR/DST 8E2	1	1
	NRR/DST/SELB 8D	1	1	NRR/DST/SICB 7E	1	1
	NRR/DST/SRXB 8E	1	1	NUDOCS-ABSTRACT	1	1
	OC/LEMB	1	0	OGC/HDS1	1	0
	<u>REG FILE</u> 01	1	1	RES/DSIR/EIB	1	1
EXTERNAL:	LPDR	1	1	NRC PDR	1	1
	NSIC	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 27 ENCL 25

mla-4  
ent

R  
I  
D  
S  
/  
A  
D  
D  
S



Carolina Power & Light Company

AUG 03 1990

SERIAL: NLS-90-147

United States Nuclear Regulatory Commission  
ATTENTION: Document Control Desk  
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
STEAM GENERATOR TUBE RUPTURE REANALYSES

Gentlemen:

Carolina Power & Light Company (CP&L) hereby submits additional information concerning operator action times assumed in the Steam Generator Tube Rupture (SGTR) analyses for the Shearon Harris Nuclear Power Plant. This information, contained in Attachment 1, was requested by NRC during a telephone conversation on July 12, 1990.

By letter dated December 15, 1989, CP&L submitted the revised SGTR analysis along with a commitment to upgrade the Pressurizer Power-Operated Relief Valve (PORV) manual actuation components, controls, and power supplies to safety-grade for use in the SGTR event only. The plant modification to upgrade two of the Pressurizer PORVs to safety-grade for use in the SGTR event will be completed during the next refueling outage (Fuel Cycle 4).

If you have any questions on this submittal or require additional information on this subject, please contact Mr. J. H. Eads at (919) 546-4165.

Yours very truly,

Leonard I. Ioflin  
Manager  
Nuclear Licensing Section

Attachment

JHE/jhe(porv)

cc: Mr. R. A. Becker  
Mr. S. D. Ebnetter  
Mr. J. E. Tedrow

9008090101 900803  
PDR ADOCK 05000400  
P FDC

411 Fayetteville Street • P. O. Box 1551 • Raleigh, N. C. 27602

000069

A001  
119

## Attachment 1

SGTR Operator Action Times

Action	February-April 1989 Simulator Data (15 crews)		August 1989 Simulator Data <sup>1</sup>	Time Used In Re-Analysis
	mean	mean + 2 $\sigma$	mean	
1. Identify and isolate ruptured S/G (both steam & FW/AFW lines)	10 min. 55 sec. <sup>2</sup>	13 min. 35 sec.	9 min. 4 sec.	13 min. 35 sec.
2. Operator action to initiate cooldown (open S/G PORV)	4 min. 55 sec. <sup>3</sup>	8 min. 1 sec.	2 min. 16 sec.	8 min. 1 sec.
3. Operator action to initiate RCS depressurization (from stabilized RCS temperature to open prz. PORV)	1 min. 26 sec.	2 min. 14 sec.	1 min. 37 sec.	2 min. 16 sec.
4. Time to terminate SI (from close prz. PORV to closing BIT outlet valves)	N/A <sup>4</sup>	N/A	2 min. 34 sec.	3 min. <sup>5</sup> 0 sec.

<sup>1</sup> Five simulator runs using 2 non-licensed crews and 3 licensed crews.

<sup>2</sup> Mean time of 10 min. 55 sec. based only on 11 simulator runs due to simulation problem modelling time to reactor trip during the first four runs; this only affected the timing of the Operator Action Number 1.

<sup>3</sup> Mean time of 4 min. 55 sec. based only on 14 simulator runs due to an operator error on one crew which resulted in an abnormally short operator action time.

<sup>4</sup> The simulator runs conducted in February - April 1989, modelled all 3 pressurizer PORVs as inoperable, therefore, timing of Operator Action Number 4 was not possible.

<sup>5</sup> Due to the limited sample size, the bounding time was established by conservatively using the longest measured time.



1

2