REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8411260268 DOC.DATE: 84/11/21 NOTARIZED: NO DOCKET #
FACIL:50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina 05000400
AUTH.NAME AUTHOR AFFILIATION
ZIMMERMAN,S.R. Carolina Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
DENTON,H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Forwards response to SER Confirmatory Item 11 re pressure-temp curve. Present curves do not require rev.

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

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
	NRR LB3 BC	01	7	7				
INTERNAL:	ACRS	09	6	6	ADM/LFMB		1	0
	ELD/HDS1		1	0	NRR/DE/MTEB		1	1
	NRR/DL DIR		1	1	NRR/DL/ORAB		1	0
	NRR/DSI/METB		1	1	NRR/DSI/RAB		1	1
	REG FILE	04	1	1	RGN2		1	1
EXTERNAL:	LPDR	03	1	1	NRC PDR	02	1	1
	NSIC	05	1	1	NTIS		1	1

TOTAL NUMBER OF COPIES REQUIRED: LTTR 26 ENCL 23

CP&L

Carolina Power & Light Company

NOV 21 1984

SERIAL: NLS-84-248

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
UNIT NO. 1 - DOCKET NO. 50-400
PRESSURE-TEMPERATURE CURVE

Dear Mr. Denton:

Carolina Power & Light Company hereby submits additional information concerning the pressure-temperature curve, per Appendix G, 10 CFR 50, for the Shearon Harris Nuclear Power Plant. This information is in response to Safety Evaluation Report Confirmatory Item 11 from the Materials Engineering Branch.

If you have further questions or desire additional information, please contact our staff.

Yours very truly,

S. R. Zimmerman
Manager
Nuclear Licensing Section

JHE/ccc (200NLU)

Attachment

cc: Mr. B. C. Buckley (NRC)
Mr. G. F. Maxwell (NRC-SHNPP)
Mr. J. P. O'Reilly (NRC-RII)
Mr. Travis Payne (KUDZU)
Mr. Daniel F. Read (CHANGE/ELP)
Chapel Hill Public Library
Wake County Public Library
Mr. Wells Eddleman
Mr. John D. Runkle
Dr. Richard D. Wilson
Mr. G. O. Bright (ASLB)
Dr. J. H. Carpenter (ASLB)
Mr. J. L. Kelley (ASLB)

A001

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

SHEARON HARRIS NUCLEAR POWER PLANT
SAFETY EVALUATION REPORT
CONFIRMATORY ITEM NO. 11

ITEM

The applicant's pressure-temperature curves meet all the requirements of Appendix G, 10 CFR 50, except for the safety margins required for the closure flange region materials. However, the applicant has indicated that he will revise the pressure-temperature limits to conform with the safety margins required by Appendix G, 10 CFR 50, for the closure flange region materials.

RESPONSE

The limiting beltline material for Shearon Harris Nuclear Power Plant (SHNPP) Unit 1 is correctly stated in the Safety Evaluation Report as being plate B-4197-2, with an RT_{NDT} = 90°F. The RT_{NDT}'s for the closure flange regions of the SHNPP Unit 1 vessel are 0°F for the head flange and -8°F for the vessel flange. Thus, application of the new Appendix G rule will not modify the SHNPP Unit 1 pressure-temperature curves. When pressure exceeds 20 percent of the preservice system hydrostatic test pressure (3106 psig) or 621 psig, the temperature of the closure flange regions (i.e., the temperature of the reactor coolant) must exceed 120°F. The present curves bound that value. Likewise, for hydrostatic tests and inservice leak testing, the temperature of the closure flange regions must exceed 90°F. The present SHNPP Unit 1 curves bound this condition; therefore, the pressure-temperature curves for SHNPP Unit 1 do not require revision. SHNPP Unit 2 was canceled in December 1983; therefore, information relative to that unit is no longer necessary.