

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9208140029 DOC. DATE: 92/08/11 NOTARIZED: NO DOCKET # 05000400
 FACIL: 50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina
 AUTH. NAME AUTHOR AFFILIATION
 VERRILLI, M. Carolina Power & Light Co.
 HINNANT, C.S. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 92-007-00: on 920712, observed that condenser absolute pressure turbine exhaust boot seal failed causing reactor trip. Plans made to replace entire boot seal in upcoming refueling outage. W/920811 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: Application for permit renewal filed. 05000400

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INTERNAL:	ACNW		2	2		ACRS		2	2
	AEOD/DOA		1	1		AEOD/DSP/TPAB		1	1
	AEOD/ROAB/DSP		2	2		NRR/DET/EMEB 7E		1	1
	NRR/DLPQ/LHFB10		1	1		NRR/DLPQ/LPEB10		1	1
	NRR/DOEA/OEAB		1	1		NRR/DREP/PRPB11		2	2
	NRR/DST/SELB 8D		1	1		NRR/DST/SICB8H3		1	1
	NRR/DST/SPLB8D1		1	1		NRR/DST/SRXB 8E		1	1
	REG FILE 02		1	1		RES/DSIR/EIB		1	1
	RGN2 FILE 01		1	1					
EXTERNAL:	EG&G BRYCE, J.H		2	2		L ST LOBBY WARD		1	1
	NRC PDR		1	1		NSIC MURPHY, G.A		1	1
	NSIC POORE, W.		1	1		NUDOCS FULL TXT		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!



Carolina Power & Light Company

P.O. Box 165 • New Hill, N.C. 27562

C. S. HINNANT
General Manager - Harris Plant

AUG 11 1992

Letter Number: HO-920116

U.S. Nuclear Regulatory Commission
ATTN: NRC Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT UNIT 1
DOCKET NO. 50-400
LICENSE NO. NPF-63
LICENSEE EVENT REPORT 92-007-00

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours

C. S. Hinnant
General Manager
Harris Nuclear Project

MV:dmw

Enclosure

cc: Mr. S. D. Ebnetter (NRC - RII)
Mr. N. B. Le (NRC - RII)
Mr. J. E. Tedrow (NRC - SHNPP)
Mr. G. E. Vaughn

140013

MEM/LER92-007/1/OS1

9208140029 920811
PDR ADOCK 05000400
S PDR

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Shearon Harris Nuclear Power Plant - Unit #1		DOCKET NUMBER (2) 0 5 0 0 0 4 0 0	PAGE (3) 1 OF 0 3
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TITLE (4)
Reactor Trip due to failure of the Low Pressure Turbine Exhaust Boot Seal.

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	7	1 2 9 2	9	2	0 0 7	0	8	1 1 9 2			0 5 0 0 0

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)										
POWER LEVEL (10) 1 0 0	20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)						
	20.405(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(v)	73.71(c)						
	20.405(a)(1)(ii)	50.36(c)(2)		50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)						
	20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)							
	20.405(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(vii)(B)							
	20.405(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME Mike Verrilli Specialist - Regulatory Compliance	TELEPHONE NUMBER 9 1 9 3 6 2 - 1 2 3 0 3
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
B	S G	E X J	U 0 6 6	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

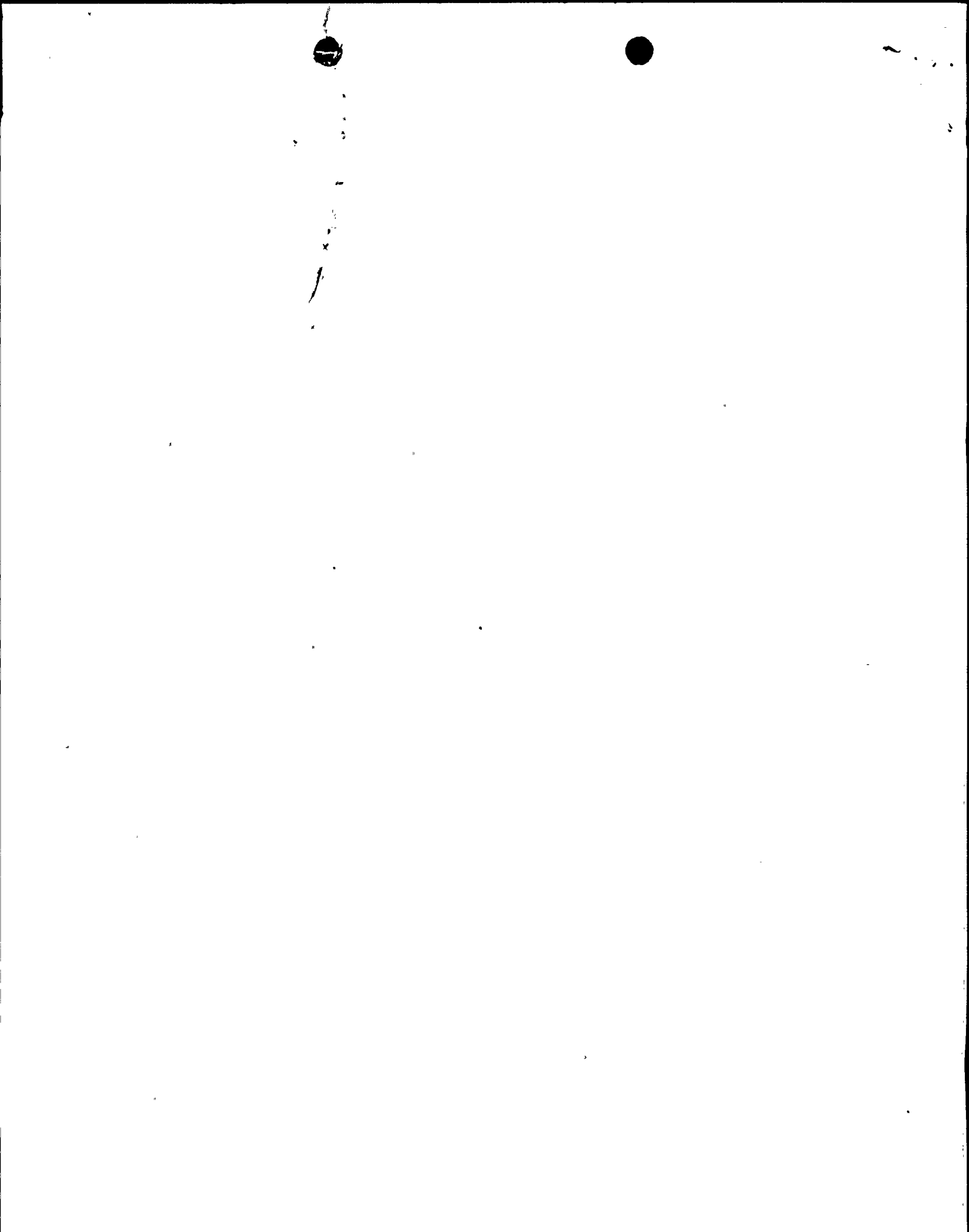
MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

ABSTRACT:

On July 12, 1992 at 0208 hours an automatic turbine trip and reactor trip occurred due to low condenser vacuum. All safety systems functioned as required, including an automatic Auxiliary Feedwater (AFW) System actuation on steam generator 10-10 level. Main control room personnel stabilized the plant using the appropriate emergency operating procedures. The condenser low vacuum was caused by a failure of the north low pressure turbine exhaust boot seal. This seal is a fabric reinforced rubber expansion joint and appears to have failed due to routine fatigue caused by aging. The failed portion of the seal was repaired on July 13, 1992 and plans were made to replace the entire boot seal in the upcoming refueling outage which begins in September 1992.

This event is being reported in accordance with 10CFR50.73(a)(2)(iv) as an Engineered Safety Feature and Reactor Protection System actuation.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Shearon Harris Nuclear Power Plant Unit #1	DOCKET NUMBER (2) 0 5 0 0 0 4 0 0	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		9 2	- 0 0 7	- 0 0	0 2	OF 0 13

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

EVENT DESCRIPTION:

On July 12, 1992 the plant was operating in Mode-1 at 100% power. At 0200 hours a control room operator observed that condenser absolute pressure had increased to 7 inches Hg. Actions were immediately taken in accordance with the "Decrease in Condenser Vacuum" Abnormal Operating Procedure (AOP-012). Unit load was decreased and condenser absolute pressure appeared to stabilize at approximately 7.5 inches Hg. At 0208 condenser absolute pressure increased very rapidly and indication went off-scale high. A turbine trip on low condenser vacuum generated a reactor trip. Operators then stabilized the plant using the Emergency Operating Procedure (EOP) network. The transient immediately following the turbine trip/reactor trip (2:08:33) caused an automatic Auxiliary Feedwater (AFW) System actuation on steam generator lo-lo level as expected. Both motor-driven pumps operated as required and were then manually secured by the control operator at 0212 hours.

There have been no previous Licensee Event Reports issued due to a turbine trip and reactor trip caused by a turbine exhaust boot failure.

CAUSE:

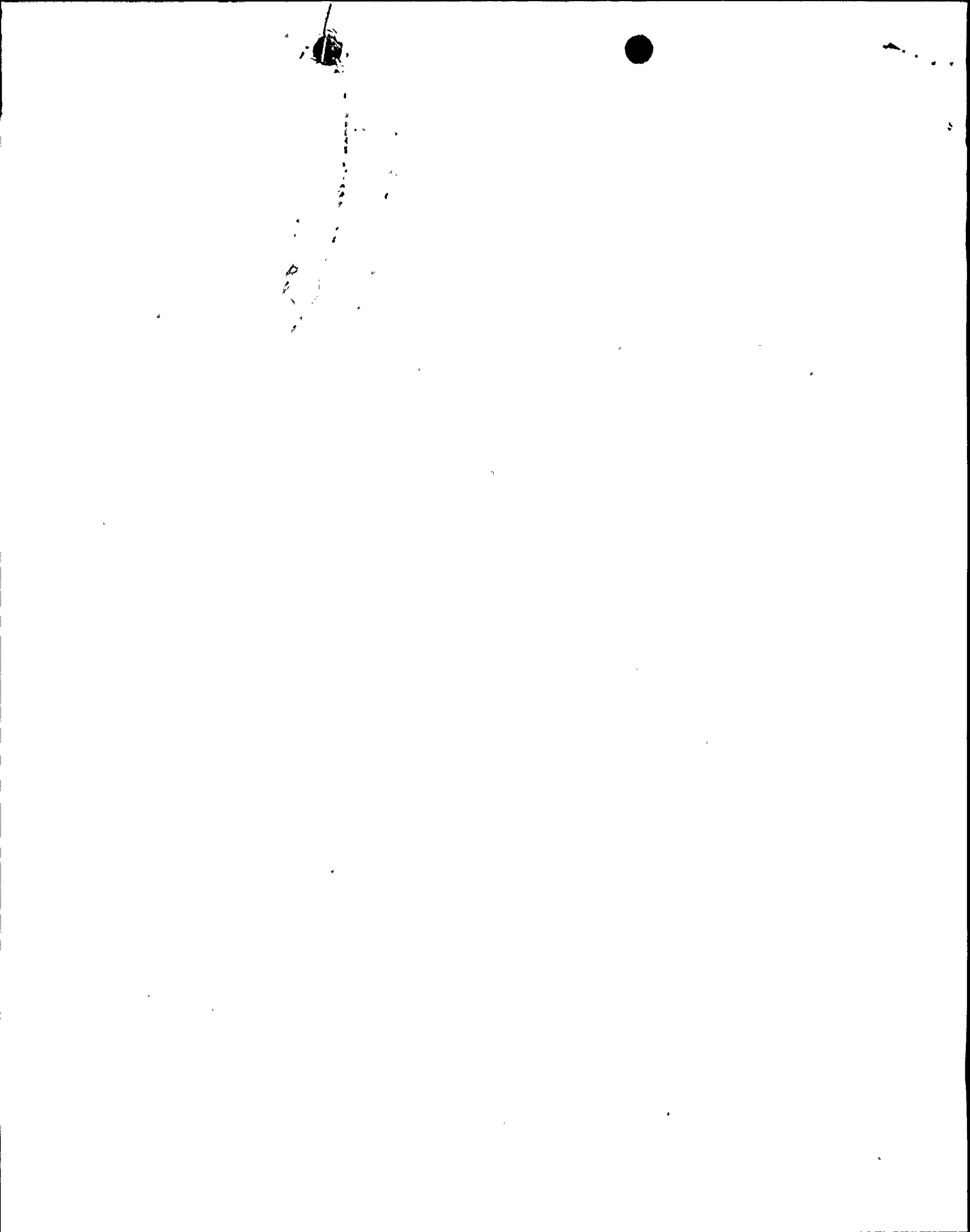
The cause for the condenser low vacuum condition was discovered to be a failure of the north low pressure turbine exhaust boot seal (E1IS-SG, Manufacturer-Uniroyal). This seal is a fabric reinforced rubber expansion joint and appears to have failed due to routine fatigue caused by aging. A horizontal tear approximately five feet in length was found. Investigation into additional possible failure modes is currently in progress.

SAFETY SIGNIFICANCE:

There were no safety consequences as a result of this event. All safety systems functioned as required to place the plant in a safe condition.

CORRECTIVE ACTIONS:

1. Repairs to the low pressure turbine exhaust boot seal were completed on July 13, 1992.
2. Plans were made to replace the entire boot seal in the upcoming refueling outage starting in September 1992.



**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Shearon Harris Nuclear Power Plant Unit #1	DOCKET NUMBER (2) 0 5 0 0 0 4 0 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 2	- 0 0 7	- 0 0	0 3	OF	0 3

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

EIIS Information:

Condenser System - SG
Auxiliary Feedwater - BA

