

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9006200088 DOC.DATE: 90/06/15 NOTARIZED: NO DOCKET #  
 FACIL:50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina 05000400  
 AUTH.NAME AUTHOR AFFILIATION  
 SCHWABENBAUER Carolina Power & Light Co.  
 RICHEY,R. Carolina Power & Light Co.  
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-014-00:on 900513,Tech Spec violation due to exceeded  
 release rates caused by personnel error.

W/9 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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NRR/DOEA/OEAB11	1 1	NRR/DREP/PRPB11	2 2
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NRR/DST/SPLB8D1	1 1	NRR/DST/SRXB 8E	1 1
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RGN2 FILE 01	1 1		

EXTERNAL: EG&G STUART,V.A	4 4	L ST LOBBY WARD	1 1
LPDR	1 1	NRC PDR	1 1
NSIC MAYS,G	1 1	NSIC MURPHY,G.A	1 1
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NOTE TO ALL "RIDS" RECIPIENTS:

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**CP&L**

Carolina Power & Light Company

P. O. Box 165 • New Hill, N. C. 27562

JUN 15 1990

R. B. RICHEY  
Manager  
Harris Nuclear Project

Letter Number: HO-900105 (0)

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 90-014-00

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,



R. B. Richey, Manager  
Harris Nuclear Project

RBR:msb

Enclosure

cc: Mr. R. A. Becker (NRR)  
Mr. S. D. Ebner (NRC - RII)  
Mr. J. E. Tedrow (NRC - SHNPP)

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PDR ALOCK 05000400  
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MEM/LER-90-014/1/OS1

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EXPIRES: 4/30/92

## LICENSEE EVENT REPORT (LER)

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-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 | 1 | OF | 0 | 3

TITLE (4)  
TECHNICAL SPECIFICATION VIOLATION DUE TO EXCEEDED RELEASE RATES  
CAUSED BY PERSONNEL ERROR

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	5	1	3	9	0	9	0	0	0	1	4	0	0	0	0
0	5	1	3	9	0	9	0	0	0	6	1	5	9	0	0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9)	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
1	20.406(a)(1)(i)	50.38(c)(1)	50.73(a)(2)(v)	73.71(c)
POWER LEVEL (10)	20.406(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
1	20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(vii)(A)	
0	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(B)	
0	20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME  
RICHARD SCHWABENBAUER  
REGULATORY COMPLIANCE TECHNICIAN

TELEPHONE NUMBER  
AREA CODE  
9 | 1 | 9 | 3 | 6 | 2 | - | 1 | 2 | 6 | 6 | 9

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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)

The plant was operating in Mode 1, Power Operation, at 100 percent reactor power on May 16, 1990. At 0800 hours it was discovered that two Liquid Radioactive releases initiated on May 13, 1990, from the Waste Evaporator Condensate Tanks were in excess of the flow rate specified on the release permits. The permits specified a release flow rate of 14.6 gallons per minute (gpm) maximum, which was less than the maximum pump capacity of 35 gpm.

The two separate releases made were at 29.9 gpm and 29.1 gpm. The releases were initiated by two separate operators.

The cause of the event was personnel error. The release permit clearly specified the flow rate to be used. However, both operators failed to recognize the restricted flow rate of 14.6 gpm for the release.

Corrective actions include requiring the operator to transcribe the maximum release rate from the discharge permit to the discharge log, requiring the cognizant Radwaste Shift Foreman to verify the maximum release rate prior to the discharge, and counselling of the appropriate personnel.

There were no safety consequences as a result of this event. Post-release calculations, using actual Cooling Tower blowdown dilution rates determined that no 10CFR20 or 10CFR50 limits were exceeded.

This event is being reported in accordance with 10CFR50.73(a) (2) (i) (B) as a Technical Specification violation.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 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 9 0	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0	1	4	0	0	2
					OF 0 3		

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

Description

The plant was operating in Mode 1, Power Operation at 100 percent reactor power on May 16, 1990. Liquid Radioactive release permits were issued for Waste Evaporator Condensate Tanks 1&2A and 1&2B on May 13, 1990. The release permits for both tanks limited the discharge flow rates to 14.6 gallons per minute (gpm) and assumed a minimum of 4000 gallons of Cooling Tower blowdown dilution flow. The releases were made at 0200 hours, with a duration of 235.0 minutes, and 2051 hours, with a duration of 207.0 minutes, by two separate Radwaste Control Operators. At 0800 hours on May 16, 1990, it was discovered that both releases were in excess of the flow rate specified on the release permits. The releases were made at 29.9 gpm and 29.1 gpm respectively.

Cause:

The cause of the event was personnel error. The release permits for both tanks clearly specified a release rate of 14.6 gpm, which is less than the maximum pump capacity of 35 gpm. Release of a Waste Evaporator Condensate Tank is an infrequent operation which employs the same release path as the Waste Monitor Tanks.

Analysis:

There were no safety consequences as a result of this event. Post-release calculations have determined that no 10CFR20 or 10CFR50 limits were exceeded because the Cooling Tower dilution flow was great enough to maintain the required dilution factor. The release permits specified a Cooling Tower blowdown flowrate of 4000 gpm and a dilution factor of 219.3. During both releases the Cooling Tower flow rate exceeded 7500 gpm, well above the required 4000 gpm specified on the permit, resulting in dilution factors of 258.6 and 273.3, which exceeded the required dilution factor of 219.3. However, if the Cooling Tower blowdown flow rate had been reduced during either release then 10CFR20 limits would have been exceeded.

This event is being reported in accordance with 10CFR50.73 (a) (2) (i) (B) as a Technical Specification violation.

There have been no previous similar events reported.

Corrective Action/Action to Prevent Recurrence:

1. Operators will be required to transcribe the maximum release rate from the discharge permit to the discharge log.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 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   0	—   0   1   4	—   0   0	0   3	OF	0   3

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

Corrective Action/Action to Prevent Recurrence: (continued)

2. The cognizant Radwaste Shift Foreman will be required to verify the maximum release rate prior to the discharge.
3. Appropriate Radwaste personnel will be counselled emphasizing the need for attention to detail and correct implementation of written procedures.

EIIS Codes Information:

Waste Evaporator Condensate Tanks  
Cooling Tower  
Waste Monitor Tank

WD  
NN  
WD