

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9112300017 DOC. DATE: 91/12/19 NOTARIZED: NO DOCKET #
 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv 05000387
 AUTH. NAME AUTHOR AFFILIATION
 LLOYD, H. Pennsylvania Power & Light Co.
 STANLEY, H.G. Pennsylvania Power & Light Co.
 RECIPIENT NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-017-00: on 911125, fuse blew in power supply to radiation monitors serving Zone III ventilation resulting in ESF actuation. Caused by random failure. Defective fuse replaced & sys returned to normal operation. W/911219 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: LPDR 1 cy Transcripts.

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	RALEIGH, J.	1 1		
INTERNAL:	ACNW	2 2	ACRS	2 2
	AEOD/DOA	1 1	AEOD/DSP/TPAB	1 1
	AEOD/ROAB/DSP	2 2	NRR/DET/ECMB 9H	1 1
	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	RGN1 FILE 01	1 1
EXTERNAL:	EG&G BRYCE, J.H	3 3	L ST LOBBY WARD	1 1
	NRC PDR	1 1	NSIC MURPHY, G.A	1 1
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NOTES:		2 2		

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December 19, 1991

U.S. Nuclear Regulatory Commission
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Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 91-017-00
FILE R41-2
PLAS -510

Docket No. 50-387
License No. NPF-14

Attached is Licensee Event Report 91-017-00. This report is being made pursuant to 10CFR50.73(a)(2)(iv), in that an unplanned Engineered Safety Feature occurred when a fuse blew, interrupting power to various radiation monitors. This, in turn, caused the Reactor Building Zone III ventilation to isolate and the Standby Gas Treatment and Control Room Emergency Outside Air Systems to start. The condition was corrected and all systems returned to normal operation.

H. G. Stanley
Superintendent of Plant - Susquehanna

HL/mjm

cc: Mr. T. T. Martin
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
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Mr. G. S. Barber
Sr. Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 35
Berwick, PA 18603-0035

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NRC

Handwritten initials and date
12/22/91

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) Susquehanna Steam Electric Station - Unit 1		DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	PAGE (3) 1 OF 03
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TITLE (4)
Unplanned ESF Actuation When Radiation Monitor Power Interrupted

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)
1	1	2 5 9 1	1 9 1	0 1 7	0 0	1 2	1 9	9 1	SSES - Unit 2	0 5 0 0 0 3 8 8
										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"/>	60.73(a)(2)(iv)	73.71(b)					
	20.405(a)(1)(i)	60.36(c)(1)		60.73(a)(2)(v)	73.71(c)					
	20.405(a)(1)(ii)	60.36(c)(2)		60.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)					
	20.405(a)(1)(iii)	60.73(a)(2)(i)		60.73(a)(2)(viii)(A)						
	20.405(a)(1)(iv)	60.73(a)(2)(ii)		60.73(a)(2)(viii)(B)						
	20.405(a)(1)(v)	60.73(a)(2)(iii)		60.73(a)(2)(x)						

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME	AREA CODE		
Harrison Lloyd, Jr. - Power Production Engineer	7 1 7	5 4 2 - 3 9 1 7	

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO				

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

On November 25, 1991 with Unit 1 at 100% power and Unit 2 at 92% power an unplanned ESF actuation occurred when a fuse blew in the power supply to radiation monitors serving the Zone III ventilation, Standby Gas Treatment, and Control Room Emergency Outside Air Supply systems. The loss of power caused a Zone III isolation and auto-start of the SGTS & CREOASS systems. The blown fuse was replaced and all systems were returned to normal operation. The cause of the blown fuse was attributed to random failure. This event was determined to be reportable per 10CFR50.73(a)(2)(iv), as an unplanned ESF actuation. There were no safety consequences or compromises as a result of this event. All appropriate electrical parameters were checked following fuse replacement.

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) Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 1	0 1 7	0 0	0 2	OF 0 3	

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

DESCRIPTION OF EVENT

On November 25, 1991, with Unit 1 in Condition 1 at 100% power, and Unit 2 in Condition 1 at 92% power, the power supply to the radiation monitors for the refuel floor exhaust, the Standby Gas Treatment System (SGTS) exhaust event, and the emergency outside air intake was interrupted when a fuse blew. The plant responded as expected with a Reactor Building HVAC Zone 3 trip and isolation, and initiation of the 'A' SGTS and the 'A' Control Room Emergency Outside Air Supply System (CREOASS) ventilation trains. Once the cause was determined, the fuse was replaced and power restored to the radiation monitors. The SGTS and CREOASS system were secured and the Zone III ventilation system was restored to normal operation.

CAUSE OF EVENT

The cause of the power loss to the radiation monitors was a blown fuse. The cause of the blown fuse was attributed to random failure. The power supply for the radiation monitors is 24 VDC and the fuse which blew is a 1 amp cartridge type fuse. The electronic components contained in the power supply generate minimal current and it is therefore difficult to determine the cause of the fuse blowing. Satisfactory operation of the radiation monitors after fuse replacement provides adequate assurance that there are no other electrical problems within the power supply circuit. There were no work activities involving this equipment in progress at the time of the event. After fuse replacement all power supply voltages indicated correctly, both loaded and unloaded and no abnormal indications were observed.

REPORTABILITY/ANALYSIS

This event was determined to be reportable per 10CFR50.73(a)(2)(iv), in that an unplanned ESF actuation occurred when power was interrupted to radiation monitors for the Zone III ventilation, SGTS, and CREOASS systems causing auto-initiation of the systems. There were no safety consequences or compromises as a result of this event and the event did not effect our ability to protect the health and safety of the public or plant personnel. The systems operated properly and per design upon system initiation. This event would not have been more significant at any other initial operating condition.

In accordance with guidance provided in NUREG 1022, Supplement 1, item 14.1; the required submission date for this report was determined to be December 26, 1991.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 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) Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 1	— 0 1 7	— 0 0	0 3	OF	0 3

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

CORRECTIVE ACTION

The defective fuse was replaced and all systems were returned to normal operation/alignment. All appropriate electrical parameters were checked and no abnormalities were noted. An Instrument Performance Indication corrective action worksheet was completed and entered into the database for equipment performance trending. No further action is planned at this time.

ADDITIONAL INFORMATION

Failed Component Identification: None

Previous Similar Events:

Although there have been previous events involving auto-initiation of Zone III isolation, SGTS, and CREOASS, there were none caused by fuse blowing in the radiation monitors power supply.