

**ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM**

**REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)**

ACCESSION NBR: 8712140263    DOC. DATE: 87/12/11    NOTARIZED: NO    DOCKET #  
 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv    05000387  
 AUTH. NAME    AUTHOR AFFILIATION  
 HIRT, J.A.    Pennsylvania Power & Light Co.  
 BYRAM, R.G.    Pennsylvania Power & Light Co.  
 RECIP. NAME    RECIPIENT AFFILIATION

SUBJECT: LER 87-030-00: on 871113, damaged wire results in blown fuse & inadvertent ESF actuation.

W/8    ltr.

DISTRIBUTION CODE: IE22D    COPIES RECEIVED: LTR 1 ENCL 1    SIZE: 3pp.  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: 1cy NMSS/FCAF/PM.    LPDR 2cys Transcripts.    05000387

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	PD1-2	LA	1	1	PD1-2	PD	1	1	/
	THADANI,	M	1	1					A
INTERNAL:	ACRS	MICHELSON	1	1	ACRS	MOELLER	2	2	D
	AEOD	DOA	1	1	AEOD	DSP/NAS	1	1	D
	AEOD	DSP/ROAB	2	2	AEOD	DSP/TPAB	1	1	S
	ARM	DCTS/DAB	1	1	DEDRO		1	1	
	NRR	DEST/ADS	1	0	NRR	DEST/CEB	1	1	
	NRR	DEST/ELB	1	1	NRR	DEST/ICSB	1	1	
	NRR	DEST/MEB	1	1	NRR	DEST/MTB	1	1	
	NRR	DEST/PSB	1	1	NRR	DEST/RSB	1	1	
	NRR	DEST/SGB	1	1	NRR	DLPQ/HFB	1	1	
	NRR	DLPQ/QAB	1	1	NRR	DOEA/EAB	1	1	
	NRR	DREP/RAB	1	1	NRR	DREP/RPB	2	2	
	NRR	DRIS/SIB	1	1	NRR	PMAS/ILRB	1	1	
	REG FILE	02	1	1	RES	DEPY GI	1	1	
	RES-TELFORD,	J	1	1	RES	DE/EIB	1	1	
	RGN1 FILE	01	1	1					
EXTERNAL:	EG&G	GROH, M	5	5	FORD	BLDG HOY, A	1	1	R
	H ST	LOBBY WARD	1	1	LPDR		2	2	I
	NRC	PDR	1	1	NSIC	HARRIS, J	1	1	D
	NSIC	MAYS, G	1	1					S
NOTES:			3	3					/

TOTAL NUMBER OF COPIES REQUIRED: LTR 50 ENCL 49

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit One	DOCKET NUMBER (2) 0 5   0 0   0 3   8 7	PAGE (3) 1 OF 0 2
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TITLE (4)  
 Damaged Wire Results in Blown Fuse and an Inadvertant Engineered Safeguard Feature Actuation.

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 (3)	
1	1	13	8	7	03	0	0	12	1	1	87	0 5   0 0   0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)												

OPERATING MODE (9) 4	POWER LEVEL (10) 0 0 0	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.405(e)	50.38(e)(1)	50.38(e)(2)	50.73(a)(2)(i)	50.73(a)(2)(ii)	50.73(a)(2)(iii)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vi)	50.73(a)(2)(vii)(A)	50.73(a)(2)(vii)(B)	50.73(a)(2)(viii)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
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LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME Jeffrey A. Hirt - Engineer Level II		AREA CODE 7 1 7	NUMBER 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)	
YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	MONTH	DAY
	<input checked="" type="checkbox"/>		

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

On November 13, 1987, at approximately 2017 hours, a fuse blew in the control logic of the Containment Instrument Gas suction outboard isolation valve. The unit was in Condition 4. Electrical Maintenance personnel were performing MT-GE-028 "Target Rock Solenoid Valve Position Indication Maintenance" in accordance with surveillance test SO-125-015 "Eighteen (18) Month Containment Instrument Gas Remote Position Indicator (RPI) Checks." The procedure directed the electrician to remove the reed switch housing cover to SV-12605 in order to verify that the valve was operating properly. When the electrician performed this step, a fuse blew in the control logic to the valve, causing SV-12605 to close. As a result of SV-12605 closing, the instrument gas compressor tripped. The electrician investigated and found a nicked wire connected to the reed switch. After the electrician taped the wire, the valve operated properly.

The cause of the blown fuse was apparently due to a nicked wire to the reed switch. The nicked wire is believed to have shorted to ground causing the fuse to blow. Interim corrective action included taping the nicked wire. On November 17, 1987, Electrical Maintenance personnel replaced the damaged wire.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Susquehanna Steam Electric Station Unit One	DOCKET NUMBER (2) 0   5   0   0   0   3   8   7   8   7	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		87	- 0   3   0	- 0   0	0   2	OF 0   2

TEXT (If modified, use NRC Form 368A-1) (17)

EVENT DESCRIPTION

On November 13, 1987, at approximately 2017 hours, a fuse blew in the control logic of the Containment Instrument Gas (CIG) (EIIIS CODE: LD) suction outboard isolation valve. The unit was in Condition 4. Electrical Maintenance personnel were performing MT-GE-028 "Target Rock Solenoid Valve Position Indication Maintenance" in accordance with surveillance test SO-125-015 "Eighteen (18) Month Containment Instrument Gas Remote Position Indicator (RPI) Checks." The procedure directed the electrician to remove the reed switch housing cover to SV-12605 in order to verify that the valve was operating properly. When the electrician performed this step, a fuse blew in the control logic to the valve, causing SV-12605 to close. As a result of SV-12605 closing, the instrument gas compressor (IEEE CODE: CMP) tripped. The electrician investigated and found a nicked wire connected to the reed switch. After the electrician taped the wire, the valve operated properly.

CAUSE/CORRECTIVE ACTIONS

The cause of the blown fuse was apparently due to a nicked wire to the reed switch. The nicked wire is believed to have shorted to ground causing the fuse to blow. Interim corrective action included taping the nicked wire. On November 17, 1987, Electrical Maintenance personnel replaced the damaged wire.

SIMILAR FAILURES

A review did not reveal any similar failures in the Containment Instrument Gas System.

ANALYSIS OF EVENT

This event did not pose any significant safety consequence. The blown fuse in the control logic simulated a closed signal to the valve. The valve closed. If the fuse had blown during an accident, the valve would have performed its design function by closing and isolating containment.

REPORTABILITY

The event was determined to be reportable to the Commission per 10CFR50.73(a) (2) (iv). The unexpected closure of the containment isolation valve is considered an inadvertent actuation of an Engineered Safety Feature.



Pennsylvania Power & Light Company

P.O. Box 451 • Berwick, PA 18603-0451 • 717/542-2151

December 11, 1987

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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 87-030-00  
FILE R41-2  
PLAS - 291

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

Attached is a Licensee Event Report 87-030-00. This event was determined reportable per 10CFR50.73(a)(a)(iv), in that a fuse blew in the control logic to a containment isolation valve causing the valve to close. This is considered an inadvertent actuation of an Engineered Safety Feature.

R. G. Byram  
Superintendent of Plant - Susquehanna

cc: Mr. William Russell  
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