

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8910030130      DOC. DATE: 89/09/28      NOTARIZED: NO      DOCKET #  
 FACIL: 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylvania      05000388  
 AUTH. NAME      AUTHOR AFFILIATION  
 RYDER, T.S.      Pennsylvania Power & Light Co.  
 BYRAM, R.G.      Pennsylvania Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 89-007-01: on 890829, primary containment isolation valve closure occurred due to personnel error.      W/8.      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.      05000388

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	PD1-2 LA	1 1	PD1-2 PD	1 1
	THADANI, M	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	ACRS WYLIE	1 1	AEOD/DOA	1 1
	AEOD/DSP/TPAB	1 1	AEOD/ROAB/DSP	2 2
	DEDRO	1 1	NRR/DEST/CEB 8H	1 1
	NRR/DEST/ESB 8D	1 1	NRR/DEST/ICSB 7	1 1
	NRR/DEST/MEB 9H	1 1	NRR/DEST/MTB 9H	1 1
	NRR/DEST/PSB 8D	1 1	NRR/DEST/RSB 8E	1 1
	NRR/DEST/SGB 8D	1 1	NRR/DLPQ/HFB 10	1 1
	NRR/DLPQ/PEB 10	1 1	NRR/DOEA/EAB 11	1 1
	NRR/DREP/RPB 10	2 2	NUDOCS-ABSTRACT	1 1
	<u>REG FILE</u> 02	1 1	RES/DSIR/EIB	1 1
	RGNI FILE 01	1 1		
EXTERNAL:	EG&G WILLIAMS, S	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
	NUDOCS FULL TXT	1 1		
NOTES:		2 2		

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Pennsylvania Power & Light Company

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September 28, 1989

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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 89-007-00  
FILE R41-2  
PLAS -381

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Docket No. 50-388  
License No. NPF-22

Attached is Licensee Event Report 89-007-00. This event is reportable per 10CFR50.73(a) (2) (iv) in that an ESF actuation occurred when primary containment isolation valves closed following a personnel error involving fuse removal during a plant evolution.

  
R.G. Byram  
Superintendent of Plant - Susquehanna

TSR/mjm

cc: Mr. W.T. Russell  
Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
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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) <b>Susquehanna Steam Electric Station - Unit 2</b>	DOCKET NUMBER (2) <b>0 5 0 0 0 3 1 8 8</b>	PAGE (3) <b>1 OF 0 1 3</b>
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TITLE (4)  
**Primary Containment Isolation Valve Closure Due to 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 8	2 9	8 9	8 9	0 0 7	0 0 0	0 9	2 8	8 9		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (8) **1**

POWER LEVEL (10) **1 0 0**

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

20.402(b)	<input type="checkbox"/>	20.406(e)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	<input type="checkbox"/>	73.71(b)	<input type="checkbox"/>
20.406(a)(1)(i)	<input type="checkbox"/>	50.36(e)(1)	<input type="checkbox"/>	50.73(a)(2)(v)	<input type="checkbox"/>	73.71(c)	<input type="checkbox"/>
20.406(a)(1)(ii)	<input type="checkbox"/>	50.36(e)(2)	<input type="checkbox"/>	50.73(a)(2)(vi)	<input type="checkbox"/>	OTHER (Specify in Abstract below and in Text, NRC Form 366A)	<input type="checkbox"/>
20.406(a)(1)(iii)	<input type="checkbox"/>	50.73(a)(2)(i)	<input type="checkbox"/>	50.73(a)(2)(vii)(A)	<input type="checkbox"/>		<input type="checkbox"/>
20.406(a)(1)(iv)	<input type="checkbox"/>	50.73(a)(2)(ii)	<input type="checkbox"/>	50.73(a)(2)(vii)(B)	<input type="checkbox"/>		<input type="checkbox"/>
20.406(a)(1)(v)	<input type="checkbox"/>	50.73(a)(2)(iii)	<input type="checkbox"/>	50.73(a)(2)(viii)	<input type="checkbox"/>		<input type="checkbox"/>

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>T.S. Ryder - Power Production Engineer</b>	TELEPHONE NUMBER AREA CODE <b>7 1 7 5 4 2 - 3 2 3 5</b>
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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

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)

On August 29, 1989 at 0410 hours with Unit 2 operating in Condition 1 at 100% power, an ESF actuation occurred when the inboard and outboard primary containment isolation valves for the "B" loop of the Containment Atmosphere Control (CAC) system isolated. Nuclear Plant Operators who were supporting system preparation for Local Leak Rate Testing of primary containment penetrations associated with the containment purge valves removed fuses in the wrong panel resulting in the unplanned closure of the CAC valves. The cause of this event was personnel error consisting of inadequate self checking and verification. The NPO's removed fuses F14 and F15 in panel 2C661B3 instead of in panel 2C661A3. The event was reportable per 10CFR50.73(a)(2)(iv) in that the closure of the CAC system isolation valves constituted an unplanned ESF actuation. There were no safety consequences or compromise to the public health or safety as a result of this event. The isolation valves are designed to close following a design basis LOCA. Since the valves actuated to the closed condition, they were fulfilling their design accident function. Operations confirmed proper plant response after which fuses F14 and F15 were reinstalled in Panel 2C661B3. The "B" loop of the CAC system was restored to a proper lineup. A 4 hour non-emergency ENS phone call was made to the Commission reporting this event at 0711 hours. Operations will conduct training to emphasize the importance of self-checking and attention to detail in performing routine blocking evolutions in the plant.

**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)  Unit 2 Susquehanna Steam Electric Station	DOCKET NUMBER (2)  016000388	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		89	007	00	02	OF	03

TEXT (If more space is required, use additional NRC Form 306A's) (17)

DESCRIPTION OF EVENT

On August 29, 1989 at 0410 hours with Unit 2 operating in Condition 1 at 100% power, an Engineered Safety Feature (ESF) actuation occurred when the inboard and outboard primary containment isolation valves for the "B" loop of the Containment Atmosphere Control (CAC, EIIS Code: BB) system isolated. The CAC system has two independent loops which serve a containment air sampling function. Nuclear Plant Operators (NPO's, utility non-licensed personnel) were supporting system preparation for Local Leak Rate Testing (LLRT) of primary containment penetrations X-26 and X-202. Fuses F14 and F15 were supposed to be removed from panel 2C661A3 in order to deactivate Containment Purge Valves HV-25713 and HV-25703 for the LLRT. Instead, the NPO's removed fuses F14 and F15 from panel 2C661B3 resulting in the unplanned closure of the CAC valves.

CAUSE OF EVENT

The Operations support activity consisted of removing two fuses, F14 and F15, in panel 2C661A3. A tailboard meeting was held with the NPO's who were going to perform the task which consisted of reviewing the aspects of the activity with them prior to their going into the plant. The NPO's went to panel 2C661B3 instead of 2C661A3 where fuses F14 and F15 were removed. Labelling at both panels was clearly designated. The cause of this event was personnel error consisting of inadequate self checking and verification. Prior to removing the fuses, it was not positively ensured that the correct panel had been selected. A contributing factor was an incorrect mindset by one of the NPO's who had performed a similar task the night before. During the previous task, the NPO had properly removed fuses for containment purge valves in panel 2C661B3. When informed that he would be removing fuses for containment purge valves again, he developed the incorrect mindset that the location would be in Panel 2C661B3 similar to the previous day's assignment.

REPORTABILITY/ANALYSIS

The event was reportable per 10CFR50.73(a)(2)(iv) in that the closure of the CAC system isolation valves constituted an unplanned ESF actuation. There were no safety consequences or compromise to the public health or safety as a result of this event. The isolation valves are designed to close following a design basis Loss of Cooling Accident (LOCA). Since the valves actuated to the closed condition, they were fulfilling their design accident function. The fuses were reinstalled within 5 minutes which restored the containment sampling capability through the 'B' loop of CAC. The 'A' loop CAC valves were open throughout the event allowing sampling of the containment atmosphere.

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

TEXT (If more space is required, use additional NRC Form 368A's) (17)

CORRECTIVE ACTIONS

Operations confirmed proper plant response after which fuses F14 and F15 were reinstalled in Panel 2C661B3. The "B" loop of the CAC system was restored to a proper lineup. A 4 hour non-emergency ENS phone call was made to the Commission to report this event at 0711 hours. Operations will conduct training to emphasize the importance of self-checking and attention to detail in performing routine blocking evolutions in the plant.

ADDITIONAL INFORMATION

Failed Component Identification: Not applicable.

Previous similar events involving human performance errors in which incorrect fuses were removed:

- (1) LER 87-016-00 (Unit 1)
- (2) LER 88-007-00 (Unit 2)
- (3) LER 88-022-00 (Unit 1)
- (4) LER 89-008-00 (Unit 1)