

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)

Susquehanna Steam Electric Station - Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 8 7

PAGE (3)

1 OF 0 2

TITLE (4)

Auxiliary Boiler Arc-Over/Primary Containment Isolation Valves Closed.

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	0	6	8	4	8	4	0	4	3	0	1	0	7	1	6	8	5	SSS - Unit 2	0 5 0 0 0 3 8 8
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																
1			20 402(b)			20 405(e)			<input checked="" type="checkbox"/> 50 73(a)(2)(iv)			73 71(b)							
POWER LEVEL (10)			20 405(a)(1)(i)			50 36(c)(1)			50 73(a)(2)(v)			73 71(c)							
0 6 1			20 405(a)(1)(ii)			50 36(c)(2)			50 73(a)(2)(vi)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)							
			20 405(a)(1)(iii)			50 73(a)(2)(i)			50 73(a)(2)(vii)(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

L.A. Kuczynski - Nuclear Plant Specialist, Level III

TELEPHONE NUMBER

AREA CODE

7 1 7 5 4 2 - 3 7 5 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										
B	S	A	B	L	R	H	3	2	1	8	N								

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

The Station's auxiliary steam is supplied by two (2) electrode boilers. On October 6, 1984, auxiliary boiler 'B' experienced an internal arc-over. The resultant overcurrent tripped the 13.8KV breaker which supplies the boiler. This caused a transient on Startup Bus 20 which resulted in a variety of alarms and system perturbations, including the closure of valves associated with the Unit 1 Containment Radiation Monitoring system 'B' and the Reactor Water Cleanup Containment Outboard Isolation valve. These valves are part of the Primary Containment Isolation System, which is an Engineered Safety Feature. All affected equipment was returned to normal.

The boiler operating procedure has been revised and plans are underway to relocate the controls for the load and backpressure control valves. Also, stress relief cones will be installed at the boiler's high voltage terminations. These actions are expected to prevent further auxiliary boiler arc-overs.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 3/31/85

FACILITY NAME (1) Susquehanna Steam Electric Station Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7 8 4 -	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
			0 4 3 -	0 1	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 365A's) (17)

The Station's auxiliary steam is supplied by two electrode boilers. On October 6, 1984, auxiliary boiler 'B' experienced an internal arc-over, which resulted in the trip of the 13.8KV breaker which supplies the boiler. This caused a transient on Startup Bus 20 which resulted in the isolation of the Unit 1 and Unit 2 containment radiation monitoring system 'B', miscellaneous alarms, loss of power to the Main Steam Isolation Valve-Leakage Control System (Inboard) system, lock-up of the Unit 1 and Unit 2 Reactor Recirculation Pump Motor-Generator Set scoop tubes and the closure of the Unit 1 Reactor Water Cleanup (RWCU) System Outboard Isolation valve. The RWCU valve and the valves which are associated with the Containment Radiation Monitoring system 'B' are part of the Primary Containment Isolation System, which is an Engineered Safety Feature. The Station was returned to normal without incident.

Auxiliary boiler 'B' was drained and thoroughly inspected. The results of the inspection were indeterminate. A similar occurrence was reported in Licensee Event Report (LER) 82-065/03L-0. Commitments to install isolation transformers and more accurate conductivity meters were made in that LER. PP&L has elected to forego the installation of the isolation transformers because they are not an effective solution. In response to the October 6, 1984 event, eroded counter electrodes have been removed and reworked, outer insulators are being replaced and inner insulators cleaned. Boiler conductivity both before and after the event was within specifications.

The boiler operating procedure has been revised to prevent drawing excessive current during boiler startup. Plans are underway to relocate the controls for the load and backpressure control valves. Also, stress relief cones will be installed at the boiler's high voltage terminations. These actions are expected to prevent further auxiliary boiler arc-overs.



Pennsylvania Power & Light Company

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July 16, 1985

U.S. Nuclear Regulatory Commission
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SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 84-043-01
ER 100450 FILE 841-23
PLAS-103

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

Attached is Licensee Event Report 84-043-01. This event was determined reportable per 10CFR50.73(a)(2)(iv), in that the unit experienced an unanticipated Engineered Safety Feature actuation when various Primary Containment Isolation System valves closed.

T.M. Crimmins, Jr.
Superintendent of Plant-Susquehanna

LAK/pjg

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