

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **Susquehanna Steam Electric Station - Unit 2** DOCKET NUMBER (2) **050003188** PAGE (3) **1 OF 02**

TITLE (4) **Four Spurious ESF Actuations (SBGT and CROASS).**

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)	
07	05	84	84	011	0	08	03	84	SSES - Unit 1	050003187	
										05000	

OPERATING MODE (9) **3** THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	<input checked="" type="checkbox"/>	60.73(a)(2)(iv)	73.71(b)
20.406(a)(1)(i)	<input type="checkbox"/>	60.73(a)(2)(v)	73.71(c)
20.406(a)(1)(ii)	<input type="checkbox"/>	60.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.406(a)(1)(iii)	<input type="checkbox"/>	60.73(a)(2)(vii)	
20.406(a)(1)(iv)	<input type="checkbox"/>	60.73(a)(2)(viii)(A)	
20.406(a)(1)(v)	<input type="checkbox"/>	60.73(a)(2)(viii)(B)	
20.406(a)(1)(vi)	<input type="checkbox"/>	60.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **L.A. Kuczynski - Nuclear Plant Specialist, III** TELEPHONE NUMBER **711751421-13171519**

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS
B	J/E	B/K/R	G/O	6/6	N				

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 July 5 and 6, 1984, over the space of 26.5 hours, the station experienced four spurious actuations of the Standby Gas Treatment System and the Control Room Emergency Outside Air Supply System. They were all caused by a malfunctioning output breaker of the 'B' Reactor Protection System Motor-Generator set. The breaker was replaced and no further spurious actuation due to the breaker have occurred.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

TEXT (If more space is required, use additional NRC Form 388A's) (17)

On July 5, 1984 at 2040, and July 6, 1984 at 1929, 2122, and 2305, the Standby Gas Treatment System (SBGT) and Control Room Emergency Outside Air Supply System (CREOASS) experienced unanticipated actuations. All actuations were initiated by false high radiation signals that occurred when the CB8B output breaker, fed from the Unit 2 Reactor Protection System (RPS) Motor Generator Set 'B', tripped. The CB8B breaker supplies power to the 2C611 panel which contains relays dedicated to the RPS channels 'B' and 'D' and Nuclear Steam Supply Shutoff System (NS4) Channels 'B' and 'D'. Designed as de-energize to operate (fail-safe) systems, the RPS and NS4 relays actuated on the loss of power. This provided the false high radiation signal which caused the SBGT and CREOASS initiation. The SBGT and CREOASS were returned to normal lineup as soon as the initiating signals were identified as being false. Unit 1 was in Operational Condition 4 at 0% power and Unit 2 was in Operational Conditions 3 (July 5) and 2 (July 6) with power at 2% or less during these occurrences.

Investigation of the CB8B breaker after the first trip on July 5 found the current and voltage to be within tolerance. After the three trips on July 6, the breaker was replaced with a spare of the same size, type, rating, and manufacturer. Further testing concluded that the breaker's minimum trip current was just barely within the manufacturer's trip curve. The breaker has been sent to the Franklin Institute Research Laboratory for further examination.

The SBGT and CREOASS responded properly during each initiation. Since the replacement of the faulty breaker, no further spurious actuations have occurred due to the breaker tripping. It is therefore concluded that the breaker was the cause for the spurious trips and is considered an isolated event. If these occurrences had happened with the Units in Operational Condition One, there is no reason to expect that the SGTS or CREOASS would have operated any differently. The SGTS and CREOASS responses were conservative and no adverse consequences were experienced by the station or the public.



Pennsylvania Power & Light Company

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August 3, 1984

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

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 84-011-00
ER 100450 FILE 841-23
PLA- 2270

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

Attached is Licensee Event Report 84-011-00. This event was determined reportable per 10CFR50.73(a)(2)(iv), in that the station experienced four spurious actuations of the Standby Gas Treatment System and Control Room Emergency Outside Air Supply System over a period of 26.5 hours. The actuations all had a common cause, which was subsequently corrected.

H.W. Keiser
Superintendent of Plant-Susquehanna

LAK/pjg

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/1