

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 1 8 8	PAGE (3) 1 OF 0 2
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TITLE (4)  
Turbine Trip/Reactor Scram on Moisture Separator 'B' Drain Tank High Level.

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 9	3 0	8 4	8 4	0 2 1	0 0	1 1	0 1	8 4			0 5 0 0 0
											0 5 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)	20.402(b)	20.405(e)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)	80.36(e)(1)	<input type="checkbox"/>	80.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	80.36(e)(2)	<input type="checkbox"/>	80.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 356A)
	20.405(a)(1)(iii)	80.73(a)(2)(i)	<input type="checkbox"/>	80.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	80.73(a)(2)(ii)	<input type="checkbox"/>	80.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	80.73(a)(2)(iii)	<input type="checkbox"/>	80.73(a)(2)(x)	

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
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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
B	TA	LIC F11310		N					
A	TA	*   *		N					

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH DAY YEAR 0 2 0 1 8 5
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On September 30, 1984, the reactor scrambled due to a turbine trip on moisture separator 'B' drain tank high level during the performance of a Startup Test (ST) to determine the maximum feedwater pump runout capabilities. Feedwater fluctuations resulted in a 45% reactor recirculation pump runback which showed that the moisture separator 'B' drain tank level control system did not accurately respond to the transient. An evaluation of system design and operation is continuing. Any additional corrective actions will be reported in an update to this LER.

\* Not Applicable.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8   4	-   0   2   1	-   0   0	0   2	OF 0   2

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

On September 30, 1984, during the performance of a Startup Test (ST) to determine the maximum feedwater pump runout capabilities, the Unit experienced an unanticipated reactor scram from 100% power due to moisture separator 'B' drain tank high water level. Reactor Feed Pump (RFP) 'B' had been placed in manual control and a bump on the Manual Speed Controller Fast Decrease Button resulted in a rapid drop in the RFP 'B' speed. The operator immediately pushed the fast speed increase button. Feedwater flow was restored, but not before reactor level reached the point where a 45% reactor recirculation pump speed runback occurred. This caused a pressure transient throughout the main steam system. The moisture separator 'B' drain tank level swelled beyond the high level turbine trip setpoint. Except for the moisture separator drain tank level control system, the unit's response and performance throughout the transient was per design. There were no Emergency Core Cooling System actuations; none were required.

Due to the fact that the moisture separator drain tank level control system did not adequately respond to this transient, coupled with the drain valve problems which led to the scrams reported in LER 84-17, a task team has been established to evaluate the drain tank level control system. System modifications such as the installation of check valves in the moisture separator drain lines to the feedwater heaters are already under consideration. Any additional corrective actions will be reported in an update to this LER.

**PP&L**

SUSQUEHANNA STEAM ELECTRIC STATION  
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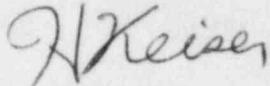
November 1, 1984

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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 84-021-00  
ER 100450 FILE 841-23  
PLAS-004

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

Attached is Licensee Event Report 84-021-00. This event was determined reportable per 10CFR50.73(a)(2)(iv), in that the Unit experienced an unanticipated Reactor Protection System actuation when the reactor scrambled following a turbine trip on moisture separator 'B' drain tank high level.



H.W. Keiser  
Superintendent of Plant-Susquehanna

LAK/pjg

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