

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
Susquehanna Steam Electric StationDOCKET NUMBER (2)  
0 5 0 0 0 3 8 7PAGE (3)  
1 OF 0 2TITLE (4)  
Spurious Actuation of Turbine Building SPING FlushEVENT DATE (5)  
MONTH: 0 DAY: 3 YEAR: 31  
LER NUMBER (6)  
YEAR: 84 SEQUENTIAL NUMBER: 022 REVISION NUMBER: 00  
REPORT DATE (7)  
MONTH: 0 DAY: 4 YEAR: 84  
OTHER FACILITIES INVOLVED (8)  
FACILITY NAMES: DOCKET NUMBER(S):  
0 5 0 0 0 0OPERATING MODE (9)  
1  
POWER LEVEL (10)  
100  
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)  
20.402(b) 20.406(e) 50.73(a)(2)(iv) 73.71(b)  
20.406(a)(1)(i) 50.38(a)(1) 50.73(a)(2)(v) 73.71(c)  
20.406(a)(1)(ii) 50.38(a)(2) 50.73(a)(2)(vi) 73.71(d)  
20.406(a)(1)(iii) X 50.73(a)(2)(vii) 50.73(a)(2)(viii)(A) OTHER (Specify in Abstract below and in Text, NRC Form 366A)  
20.406(a)(1)(iv) 50.73(a)(2)(viii)(B)  
20.406(a)(1)(v) 50.73(a)(2)(ix)LICENSEE CONTACT FOR THIS LER (12)  
NAME: Benjamin L. Wilks  
TELEPHONE NUMBER:  
AREA CODE: 717  
717 542-1323COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)  
CAUSE SYSTEM COMPONENT MANUF. TURNER REPORTABLE TO NPROS  
X IIL IMQ IN E1 01710 NSUPPLEMENTAL REPORT EXPECTED (14)  
YES (If yes, complete EXPECTED SUBMISSION DATE):  
X NO  
EXPECTED SUBMISSION DATE (15)  
MONTH: DAY: YEAR:

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

At 0732 hours on 3/31/84 with Unit 1 at full power an NPO on rounds found purge flow as the Turbine Building SPING local panel indicating the purge mode of operation alarm occurred at the same time in the printout of the control terminal in the Control Room. An LCO was entered in accordance with Technical Specification Section 3.3.7.11. Immediate corrective action was taken by resetting the purge and ensuring that normal sample flow was established. Investigation indicate the Turbine Building SPING "PURGE" command was not entered at either the local or remote control consoles nor was there any reason to believe that the command was initiated by depressing the "PURGE" push button on the local SPING panel. Discussion with the SPING vendor, Eberline Corporation, indicates that a fluctuation in the input voltage to the SPING's Auto Purge option may cause a spurious "PURGE" command. In an attempt to prevent a recurrence of this event, a pull up resistor is being added to the SPING's Auto Purge input circuit that will have the effect of maintaining a constant input voltage and thus eliminating the possibility of a spurious SPING purge.

Operator awareness identified the occurrence of this event and resulted in the SPING being returned to service in approximately 44 minutes. The health and safety of the public was not affected during this event.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES: 8/31/86

FACILITY NAME (1) Susquehanna Steam Electric Station Unit 1	JACKET NUMBER (2) 0 5 0 0 0 3 8 7	LER NUMBER (8) YEAR SEQUENTIAL NUMBER REVISION NUMBER 8 4 - 0 2 2 - 0 0 0 2 OF 0 2	PAGE (3)
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TEXT (If more space is required, use additional NRC Form 388A's) (17)

At 0732 hours on 3/31/84 with Unit 1 at full power, an NPO on rounds found purge flow at the Turbine Building SPING local panel indicating the purge mode of operation; alarms occurred at the same time in the printout of the control terminal in the Control Room. With the SPING in the PURGE mode of operation, the Iodine, Particulate and Noble Gas Radiation Monitors were no longer analyzing the atmosphere contents of the Turbine Building but the purge air supplied by the Instrument Air System.

A Limiting Condition for Operation (LCO) was entered in accordance with Technical Specification Section 3.3.7.11. Immediate corrective action was taken by resetting the purge and ensuring the normal sample flow from the Turbine Building was re-established.

Investigations into the unexplained Turbine Building SPING purge showed that the SPING "PURGE" command could have been initiated at (1) the TSC Control Terminal Keyboard, (2) The Control Room Control Terminal Keyboard, (3) The local SPING control panel via the "PURGE" push button. Inspection of the printed output from the Control Room Control Terminal showed that the PURGE command was not initiated at either of the Control Terminal Keyboards since it was not prefaced with the heading "FLUSH-ON" along with the channel number above the channel status. Furthermore, the purge could not have been initiated by depressing the PURGE push-button at the local SPING control panel since no personnel other than the NPO were in the area during this time frame.

Eberline Corporation, the SPING vendor knew of no microprocessor failure in their experience that could produce a self generated "PURGE" command. Eberline did, however, indicate that a malfunction could occur as a result of a voltage fluctuation at the input to the transistorized switch used for initiation of the AUTO PURGE option. It was concluded that this was the most probable cause for the unexplained purge of the Turbine Building SPING. Actions are being taken to eliminate input voltage fluctuations to the auto purge transistorized switch by installing a "pull up" resistor which insures a constant voltage to the input of the transistor switch.

Operator awareness identified the occurrence of this event and resulted in the SPING being returned to service in approximately forty-four (44) minutes. The health and safety of the public was not affected during this event.



Pennsylvania Power & Light Company

April 30, 1984

Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 84-022-00  
ER 100450 FILE 841-23  
PLA-2191

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Attached is Licensee Event Report 84-022-00. This event was determined reportable per 10CFR50.73(a)(2)(i) in that less than the minimum number of operable channels specified were available for monitoring Turbine Building Ventilation due to an apparent spurious flush of the Turbine Building SPING.

H.W. Keiser  
Superintendent of Plant-Susquehanna

BLW/pjg

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