

CONTROL BLOCK: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)01 PASES1 (2) 000-0000000-00 (3) 411111 (4) (5)  
7 8 9 14 15 25 26 30 37 38 58

CONT

01 REPORT SOURCE L (6) 05000387 (7) 070783 (8) 080583 (9)  
7 8 9 14 15 25 26 30 37 38 58

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 From July 7 through 10, 1983, with the unit at approx. 60% power in steady state  
03 operation, there were four instances of operation of the thermal overload heaters  
04 on the two pumps in the "A" channel of the Reactor Coolant System Leak Detection  
05 System (RCS/LDS). In all instances, either the affected pump was restarted shortly  
06 after tripping, or the other pump in the channel was placed in service. System  
07 downtimes were of short duration. Inability to restore the system would have re-  
08 quired shutdown in accordance with TS 3.4.3.1 Action statement.

09 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE  
B A (11) B (12) A (13) R E L A Y X (14) E (15) Z (16)  
7 8 9 14 15 25 26 30 37 38 58

(17) LER/RO REPORT NUMBER (18) 83 (19) 100 (20) 03 (21) L (22) 0  
21 22 23 24 25 26 27 28 29 30 31 32

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS (22) ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER (26)  
X (18) F (19) Z (20) Z (21) 0000 Y (23) N (24) A (25) X999  
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Excessive ambient temperatures in the vicinity of the system cabinets coupled with  
11 the already recognized problem of high temperatures within the cabinet to cause  
12 actuation of the thermal overload heaters. A modification to provide cabinet cool-  
13 ing is expected to mitigate the high internal cabinet temperature and prevent  
14 recurrence of this event.

15 FACILITY STATUS % POWER OTHER STATUS (30) METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)  
E (28) 060 (29) NA A (31) Operators observation  
7 8 9 14 15 25 26 30 37 38 58

16 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)  
Z (33) Z (34) NA NA  
7 8 9 14 15 25 26 30 37 38 58

17 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)  
000 (37) Z (38) NA  
7 8 9 14 15 25 26 30 37 38 58

18 PERSONNEL INJURIES NUMBER DESCRIPTION (41)  
000 (40) NA  
7 8 9 14 15 25 26 30 37 38 58

19 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION (43)  
Z (42) NA  
7 8 9 14 15 25 26 30 37 38 58

20 PUBLICITY ISSUED DESCRIPTION (45)  
N (44)  
7 8 9 14 15 25 26 30 37 38 58

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PDR ADOCK 05000387  
S PDR

NRC USE ONLY

NAME OF PREPARER L.A. Kuczynski

PHONE (717) 542-2181 X3759

JE22 7/7

ATTACHMENT

LER # 83-100/03L-0

Pennsylvania Power & Light Company  
Susquehanna Steam Electric Station  
Docket Number: 50-387

On July 7, 1983, at 2003, an alarm was received in the main control room of trouble with the "A" channel of the Reactor Coolant System (RCS) Leak Detection System (LDS).

Tech. Spec. LCO 3.4.3.1 was entered because the "B" channel of the RCS LDS was unavailable for service due to a series of previously identified problems. Investigation showed that the thermal overload heaters had actuated on the operating "A2" sample pump. The heaters were reset and the "A1" sample pump was placed in service at 2012, which cleared the LCO. At 2229, the trouble alarm was again received in the control room. The "A1" pump had tripped on thermal overload. The heater was reset and the "A2" pump placed in service at 2237, which cleared the LCO.

At 1605 on July 8, 1983, the main control room trouble alarm was again received for the "A" channel. The in-service pump was found tripped and was restarted. At 1630 the gaseous radiation monitor in the "A" channel failed. (Refer to LER 83-101/03L-0.) The "A1" pump continued to run to provide particulate monitoring until it tripped once more at 1400 on July 10. The thermal overload heaters were again reset and the pump restarted at 1445.

Each of the RCS LDS channels is housed within a separate cabinet (1C227A and 1C227B) within the Reactor Building. Investigation attributes the cause of repeated thermal overload trips of the sample pumps to internal cabinet temperatures in excess of 180°F. A modification to the cabinets, i.e. installations of fans, is planned.



# Pennsylvania Power & Light Company

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

August 5, 1983

Dr. Thomas E. Murley  
Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 83-100/03L-0  
ER 100450 FILE 841-23  
PLA-1783

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

Dear Dr. Murley:

Attached is Licensee Event Report No. 83-100/03L-0. This event was determined to be reportable per Technical Specification 6.9.1.9.b, in that, over a period of three days, there were four instances of trouble with the Reactor Coolant System (RCS) Leak Detection System train "A" sample pumps.

H.W. Keiser  
Superintendent of Plant-Susquehanna

LAK/pjg

Attachment

cc: G.G. Rhoads  
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U.S. Nuclear Regulatory Commission  
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Shickshinny, PA 18655

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