

NRC FORM 366
(12-81)
10 CFR 50

U.S. NUCLEAR REGULATORY COMMISSION
LICENSEE EVENT REPORT

APPROVED BY OMB
3150-0011

CONTROL BLOCK: (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 P A S E S 1 2 0 0 - 0 0 0 0 0 0 - 0 0 0 3 4 1 1 1 1 4 5
7 8 9 14 15 25 26 30 37 38

CONT

01 REPORT SOURCE L 6 0 5 0 0 0 3 8 7 7 0 3 2 6 8 3 8 9
7 8 40 41 45 46 50 51 55 56 59 60 64 65 68 69 70

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 In two separate occurrences four days apart, containment H₂/O₂ analyzer "B" had to
03 be declared inoperable due to erratic readings. There were no adverse consequences
04 in that the "A" analyzer was in service and operating properly. Since the problems
05 associated with continuous operation of the H₂/O₂ analyzers are intrinsic and this
06 topic is presently tracked as an Inspection Report Unresolved Item, (Reference:
07 Inspection Report 50-387/UNR 85-01-02) no further updates to this LER are planned.

08

09 SYSTEM CODE S E (11) CAUSE CODE B (12) CAUSE SUBCODE B (13) COMPONENT CODE I N S T R U (14) COMP. SUBCODE X (15) VALVE SUBCODE Z (16)
17 LER/RO REPORT NUMBER 8 3 (18) ACTION TAKEN E (19) FUTURE ACTION X (20) EFFECT ON PLANT Z (21) SHUTDOWN METHOD Z (22) HOURS 0 0 0 0 (23) SEQUENTIAL REPORT NO. 0 5 3 (24) OCCURRENCE CODE / (25) ATTACHMENT SUBMITTED Y (26) REPORT TYPE X (27) NRPD-4 FORM SUB. N (28) PRIME COMP. SUPPLIER A (29) REVISION NO. 1 (30) COMPONENT MANUFACTURER D 0 9 6 (31)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Air in-leakage at a flow indicator yielded moisture in the analyzer's sample lines,
11 The sample pump, tube cube and four pressure control valves were replaced and the
12 analyzer was returned to service. Future problems with the analyzers will be
13 reported when they meet the requirements of 10CFR 50.73.

14

15 FACILITY STATUS B (28) % POWER 0 0 0 (29) OTHER STATUS NA (30) METHOD OF DISCOVERY A (31) DISCOVERY DESCRIPTION Operator observation (32)
16 ACTIVITY CONTENT RELEASED OF RELEASE Z (33) AMOUNT OF ACTIVITY NA (35) LOCATION OF RELEASE NA (36)

17 PERSONNEL EXPOSURES NUMBER 0 0 0 (37) TYPE Z (38) DESCRIPTION NA (39)

18 PERSONNEL INJURIES NUMBER 0 0 0 (40) DESCRIPTION NA (41)

19 LOSS OF OR DAMAGE TO FACILITY TYPE Z (42) DESCRIPTION NA (43) 8608080245 860804 PDR ADOCK 05000387 S PDR

20 PUBLICITY ISSUED N (44) DESCRIPTION NA (45)

NAME OF PREPARER L.A. Kuczynski PHONE (717) 542-3759

JEZ
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ATTACHMENT

LER # 83-053/03X-1

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

The following problems have been identified as casual factors of this event:

- On at least one occasion, the analyzer was operated with the heat tracing for the sample line de-energized. This may have caused condensation which led to problems maintaining the proper flow balance. An air leak was discovered on the flow indicator which could sub-cool the sample air, yielding condensation and attendant flow problems.
- The pressure control valve (PCV) downstream of the moisture separator was dirty. The deposits were probably from dirty air samples caused by maintenance activities in containment. This valve maintains sample flow rate.
- Both PCV's downstream of the analyzer cells were fouled by a white powder. The origin of the powder is unknown. The purpose of these PCV's is to maintain three psid across the flow orifice downstream of each analyzer cell.
- The erratic flow rate may have been caused by the deterioration of the sample pump. The pump was relaced, as was the tube cube assembly.

Since this occurrence there have been many additional H₂/O₂ analyzer problem, characterized mainly by failure of the analyzer sample pumps, pressure control valves and air in-leakage resulting in water in the sample lines. These conditions have been corrected as they occurred. Organized investigation into the means to assure reliable system operations is continuing. Until a permanent fix is developed, system malfunctions will continue to be corrected as they arise. Since the problems associated with the continuous operation of the H₂/O₂ analyzers are intrinsic and this topic is presently tracked as an Inspection Report Unresolved Item (Reference: Inspection Report 50-387/UNR 85-01-02) no further updates to this LER are planned. Future problems with the analyzers will be repc ted when they meet the requirements of 10CFR50.73.



Pennsylvania Power & Light Company

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SYSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 83-053/03X-1
FILE R41-2
PLAS- 189

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

Attached please find a copy of Licensee Event Report No. 83-053/03X-1. This event was determined to be reportable per Technical Specification 6.9.1.9.b, in that the 'B' Containment Hydrogen/Oxygen Analyzer was declared inoperable.

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

LAK/cdn

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