

CONTROL BLOCK:

(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 3 4 1 1 1 1 4 5
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

CONT

01 REPORT SOURCE L 6 0 5 0 0 0 3 8 7 7 0 6 0 7 8 3 8 0 6 2 1 8 3 9
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 While in an outage, prior to performing testing on the Turbine Combined Intercept
03 Valves, the main turbine trip on high RPV level had to be bypassed to clear an in-
04 terlock. Temporary bypass documentation was initiated and logged according to pro-
05 cedure. Later, personnel discovered the bypass still installed with the unit in
06 Condition 1. Possible consequences included main turbine damage due to moisture
07 carryover and an adverse impact on MCPR due to additional pressurization which
08 could develop upon a turbine trip other than level 8 (later in the transient).

09 SYSTEM CODE H A 11 CAUSE CODE D 12 CAUSE SUBCODE Z 13 COMPONENT CODE Z Z Z Z Z Z Z 14 Z 15 VALVE SUBCODE Z 16
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

17 LER/RO REPORT NUMBER 8 3 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

18 ACTION TAKEN G 18 19 FUTURE ACTION Z 19 20 EFFECT ON PLANT Z 20 21 SHUTDOWN METHOD Z 21 22 HOURS 0 0 0 0 22 23 ATTACHMENT SUBMITTED Y 23 24 NPRD-4 FORM SUB. N 24 25 PRIME COMP. SUPPLIER Z 25 26 COMPONENT MANUFACTURER Z 9 9 9 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 This event was caused by the lack of a clear requirement for review of bypasses.
11 The event has been reviewed with all operating shifts. The procedures which control
12 system status and bypasses have been revised to include the requirement of a re-
13 view of system status prior to declaring the system operable and changing plant
14 operating conditions.

15 FACILITY STATUS E 28 1 0 0 29 30 OTHER STATUS NA 31 METHOD OF DISCOVERY A 31 32 DISCOVERY DESCRIPTION I&C troubleshooting
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

16 ACTIVITY CONTENT RELEASED OF RELEASE Z 33 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

17 PERSONNEL EXPOSURES NUMBER 0 0 0 37 38 TYPE Z 38 DESCRIPTION NA 39
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

18 PERSONNEL INJURIES NUMBER 0 0 0 40 41 TYPE Z 41 DESCRIPTION NA 42
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

19 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 43 DESCRIPTION NA 44
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

20 PUBLICITY ISSUED N 44 45 DESCRIPTION NA 46
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

NAME OF PREPARER L.A. Kuczynski

PHONE (717) 542-2181 X3759

NRC USE ONLY

ATTACHMENT

LER # 1-83-082/01T-0

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

Event Report 01-83-174 was written as a result of the failure to remove Bypass 1-83-068 prior to entering Condition 1. The Bypass was installed during Conditions 4 and 5 in accordance with Electrical and Mechanical Bypass Control procedure AD-QA-307.

The resulting effect of the failure to remove the bypass was that the reactor vessel high water level trip signals (Level 8) to the Main Turbine were made inoperable and would not have initiated a Turbine Trip on high reactor water level. This Trip is required to be operable in Condition 1 per Technical Specification 3.3.9.

The Safety Analysis for this event is similar to a Feedwater Controller Failure - Maximum Demand and a Main Turbine Trip is assumed to happen on Level 8. The resultant increase in level will also cause a Level 8 trip of the HPCI, RCIC, Reactor Feed Pump Turbines and a Reactor Recirc. Pump Runback. If a transient of this nature were to occur with the Bypass installed it would not have resulted in a Main Turbine Trip. Based on analysis performed by NPE Transient Analysis Group, this condition would have resulted in a less severe transient in the fact that the affect of the delayed Turbine Trip would have resulted in a reduced pressure transient. The Turbine Trip would have eventually been caused by moisture carryover which would have increased the levels in the Moisture Separators initiating a Turbine Trip. The result would be an increase in CPR of approximately .02 above the MCPR calculated in the analysis. Therefore, the consequences of this event do not result in temperature or pressure transients in excess of the criteria for which the fuel, pressure vessel or containment are designed.

Immediate corrective action taken was that the lifted lead removed under Bypass 1-83-068 was reterminated and an immediate evaluation begun of all outstanding bypasses for potential operational impact. The results of these audits contained herein were that no outstanding bypasses were installed which had any operational safety impact.

It is clearly noted the manner in which Bypass 1-83-068 was issued, uncovered several deficiencies. Some of these are a lack of proper evaluation by engineering to determine safety impact under all operational conditions and identification of any Limiting Conditions for Operation along with Shift Supervision approval of the bypass without assuring that it was permissible and safe to implement the bypass as written. This was further complicated by the lack of an effective mechanism to assure removal of bypasses upon declaring systems operable and subsequent Startup and reactor mode changes. As a result the following changes were instituted:

- 1) AD-QA-302 now specifies that the system status file for each system must be reviewed prior to declaring the system Operable.
- 2) AD-QA-302 now requires a review of the System Status file for Operational Condition impacts for conditions changes except entering Hot or Cold SHUTDOWN from Condition 1 or 2.

ATTACHMENT

LER # 1-83-082/01T-0

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Docket Number: 50-387

- 3) AD-QA-307 now requires the requestor to provide operational condition impacts with respect to LCO's and potential LCO's. This will include Tech. Spec. references.
- 4) AD-QA-307 now has a new bypass log which provides space for indicating LCO's and potential LCO's.
- 5) AD-QA-307 now requires shift supervision to consider potential LCO's.
- 6) AD-QA-307 now has more direction for the monthly review.
- 7) AD-QA-307 TCN-83-1004 was issued against AD-QA-307 requiring Section Head Approval of all bypasses prior to issue. This will be in effect until the program demonstrates that it operates successfully.

The resultant investigation also revealed the lack of adequate control in use of Contract Personal in the implementation of Plant Modifications and subsequent testing. This will be controlled in the future by the use of the Construction Access Authorization which is identified in AD-QA-134, effective June 15, 1983. This procedure provides a system to control plant access for construction work activities performed by non-plant staff organizations under the jurisdiction of a Plant Staff sponsor. To assure operating personnel are familiar with procedure changes and responsibilities relating to the bypass program, a letter was issued to all Shift Supervisors and shift review and document attendance. A training session was held on June 21, 1983, during the weekly Plant Engineering meeting. The purpose of this was to explain changes made to AD-QA-302 and AD-QA-307 and to emphasize responsibility and importance of proper evaluation of a bypass prior to issuance. The need to have single point contact on bypasses such that the issuing work group or individual is the removing work group or individual was also emphasized.



Pennsylvania Power & Light Company

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June 21, 1983

Mr. J.M. Allan
Acting Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 83-082/01T-0
ER 100450 FILE 841-23
PLA-3307

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

Dear Mr. Allan:

Attached please find a copy of Licensee Event Report No. 83-082/01T-0. This event was determined to be reportable per Technical Specification 6.9.1.8.b, in that a main turbine trip function (high reactor vessel level) was bypassed to perform post modification testing on turbine control valves and was not returned to service as required prior to the Unit entering Operational Condition 1.

H.W. Keiser
Superintendent of Plant-Susquehanna

LAK/pjg

attachment

cc: G.G. Rhoads
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