

CONTROL BLOCK: | | | | | | | | | | (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CONTROL BLOCK: 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 1 L O A D 1 2 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 CAT 38

LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT

CON'T

01 REPORT SOURCE L 6 0 5 0 0 0 2 5 4 7 0 3 0 7 8 2 8 0 3 2 5 8 2 9
 7 8 9 60 61 68 69 74 75 80

DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

02 At 1 a.m., the High Steam Line Differential Pressure alarm was received and

03 correspondingly the RCIC steam line isolated. Attempts to reset the isolation

04 were unsuccessful, and therefore, the RCIC System was declared inoperable. As

05 per Technical Specification 3.5.E.2, HPCI was immediately proven operable, and

06 since HPCI was operable, there were no safety implications associated with

07 this occurrence.

08

09

SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP SUBCODE VALVE SUBCODE
 C E 11 E 12 E 13 I N S T R U 14 S 15 Z 16
 9 10 11 12 13 18 19 20

17 LER-RO REPORT NUMBER 8 2 0 0 4 0 3 L 0
 21 22 23 24 26 27 28 29 30 31 32

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRO-4 FORM SUB PRIME COMP SUPPLIER COMPONENT MANUFACTURER
 E 18 X 19 Z 20 Z 21 0 0 0 0 Y 23 Y 24 N 25 B 0 8 0 26
 33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

10 The cause of this occurrence was instrument drift of the High Steam Line Flow

11 Differential Pressure Switch, DPIS-1-1360-1A, which caused the erroneous Group

12 V Isolation. The switch was recalibrated, functional tested, and returned to

13 service. Because of a recent increased drifting of these RCIC high flow

14 switches, switches not recently replaced will be replaced and all switches

will be closely monitored to verify stable calibration.

15 FACILITY STATUS % POWER OTHER STATUS 30 METHOD OF DISCOVERY DISCOVERY DESCRIPTION 32
 E 28 0 9 6 29 NA A 31 Operator Observation
 7 8 9 12 13 44 45 46 80

ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36
 Z 33 Z 34 NA NA
 7 8 9 10 11 44 45 80

PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39
 0 0 0 17 Z 38 NA
 7 8 9 11 12 13 80

PERSONNEL INJURIES NUMBER DESCRIPTION 41
 0 0 0 40 NA
 7 8 9 11 12 80

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION 43
 Z 42 NA
 7 8 9 10 80

PUBLICITY ISSUED DESCRIPTION 45
 N 44 NA
 7 8 9 10 80

NRC USE ONLY

20 N 44 NA

8204120431 820325
 PDR ADOCK 05000254
 S PDR

infurter

PHONE 309-654-2241, ext. 192

I. LER NUMBER: LER/RO 82-4/03L-0

II. LICENSEE NAME: Commonwealth Edison Company
Quad-Cities Nuclear Power Station

III. FACILITY NAME: Unit One

IV. DOCKET NUMBER: 050-254

V. EVENT DESCRIPTION:

At 1 a.m., on March 7, 1982, Unit One was operating at steady state with a thermal power of 2411 MWt and an electrical load of 797 MWe. At this time, the unit operator received a high steam line differential pressure alarm and isolation of the steam supply line on the Reactor Core Isolation Cooling System (RCIC). Attempts to reset the alarm were unsuccessful, and the RCIC System was declared to be inoperative. In accordance with Technical Specification 3.5.E.2, the High Pressure Coolant Injection System (HPCI) was proven operable at 3 a.m. The High Steam Line Flow Differential Pressure Switch was suspected to be the cause of the false signal and a Work Request was initiated to investigate and correct the problem.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The RCIC high steam flow sensing system has a one-out-of-two logic which automatically isolates the steam line in the event of a steam line break. Since the failure was to a closed position, the steam line would have isolated as intended. The HPCI System was tested and proven operable within two hours of this occurrence, and the RCIC System was returned to operation within four hours and ten minutes. Thus, safe plant operation was maintained at all times.

VII. CAUSE:

The cause of this occurrence was instrument drift. One of the two micro-switches inside the steam line high flow differential pressure switch, DPIS-1-1360-1A, closed giving rise to a false high flow signal. The switch is part of an elbow-tap differential pressure switch, manufactured by Barton Instrument Company, Model 288, using a stainless steel bellows as a pressure cell. The instrument serial number is 02884078.

VIII. CORRECTIVE ACTION:

The immediate corrective action taken was to demonstrate that the HPCI System was operable in accordance with Technical Specification 3.5.E.2. Instrument Maintenance personnel recalibrated and functionally tested the switch in accordance with ST 18, RCIC High Steam Flow Differential Switch Calibration and Functional Test. The RCIC System was tested and proven operable at 5:10 a.m. on March 7, 1982. Due to a recent trend of problems

VIII. CORRECTIVE ACTION: (Continued)

occurring with the RCIC high steam flow switches, a Work Request was initiated to replace the high flow micro-switches over one year old for both units. In addition, Instrument Maintenance will closely monitor the RCIC high steam flow instruments to verify that their calibration is stable.