

LICENSEE EVENT REPORT

CONTROL BLOCK: 1 2 3 4 5 6

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 2 3 4 5 6 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 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

L I Q A D I 0 0 0 - 0 0 0 - 0 0 0 4 1 1 1 1 4 5

LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T

0 1 2 3 4 5 6 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 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

R E P O R T S O U R C E L 6 0 5 0 0 0 2 5 4 7 0 9 1 5 8 3 3 8 1 0 0 4 8 3 9

REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 While performing QOS 201-1, "Manual Operation of Electromatic Relief Valves", the

0 3 Target Rock valve, 1-203-3A, became stuck in the open position. All Reactor para-

0 4 meters indicated the valve had partially closed, but was not fully seated. The

0 5 Reactor was at approximately 21 percent thermal power and under preparation for

0 6 shutdown for a scheduled Maintenance Outage. The probable consequences are

0 7 minimized because the Reactor was promptly tripped as per Station procedures. The

C 8 valve closed about 15 minutes later and no thermal limits were exceeded.

0 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 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

S F E C V A L V E X X B

SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP SUBCODE VALVE SUBCODE

17 LER-RO REPORT NUMBER 8 3 0 3 5 0 3 L 0

EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRD-4 FORM SUB PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

C Z Z B 0 0 0 0 Y N X T 0 2 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The cause of this occurrence is attributed to the Target Rock valve having an

1 1 eroded second stage pilot seat. The valve was replaced and tested satisfactorily,

1 2 on September 22, 1983.

1 3

1 4

1 5 D 0 2 2 NA B Routine Surveillance

FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

1 6 Z Z NA NA

ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

1 7 0 0 0 Z NA

PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

1 8 0 0 0 NA

PERSONNEL INJURIES NUMBER DESCRIPTION

1 9 Z NA

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

2 0 N

PUBLICITY ISSUED DESCRIPTION

8310170271 831004
PDR ADOCK 05000254
S PDR

NRC USE ONLY

NAME OF PREPARER

D Cook

PHONE 309-654-2241, ext 178

- I. LER NUMBER: 83-35/03L-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:

On September 15, 1983, Unit One was in the RUN mode at 0 MWe and 548 MWt. An orderly shutdown was in progress for a scheduled Maintenance Outage. At 12:26 a.m., while performing QOS 201-1, "Manual Operation of Electromatic Relief Valves", the Target Rock Safety/Relief Valve, 1-203-3A, became stuck in the open position. Despite repeated attempts to close the valve, with the control switch, it remained open. At 12:29 a.m. the Reactor was manually scrammed in accordance with abnormal procedure QOA 201-2, "Failure of a Relief Valve to Close or Seat Properly". The valve finally seated itself at 12:40 a.m. during which time Reactor pressure decreased from 920 psig to 360 psig. As soon as it was determined the valve was stuck open, a GSEP "Unusual Event" was declared. The GSEP condition was terminated when the valve properly seated. All Technical Specification thermal limits were within acceptable values.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The consequences of this event were minimal. The inability to close the valve was identified immediately, and the event was promptly terminated by manually tripping the Reactor in accordance with approved Station procedures.

During this event, Suppression Pool temperature went from 92° to 101°F. There was no radiological release. The Automatic Depressurization System function of this valve was operable at all times.

VII. CAUSE:

During the Maintenance Outage, the valve was removed and inspected. It was found that the second stage pilot seat had eroded slightly, allowing the steam above the piston to escape and thus permitting the valve to remain open (see attached drawing).

VIII. CORRECTIVE ACTION:

The Target Rock Safety/Relief Valve was replaced with a rebuilt like-for-like replacement. The valve was functionally tested successfully at 2:15 a.m. on September 22, 1983, and no further corrective action is deemed necessary. There has not been a previous failure of this type with the Target Rock Safety/Relief Valve at this facility. The Target Rock is a three-stage, Model 67F valve.

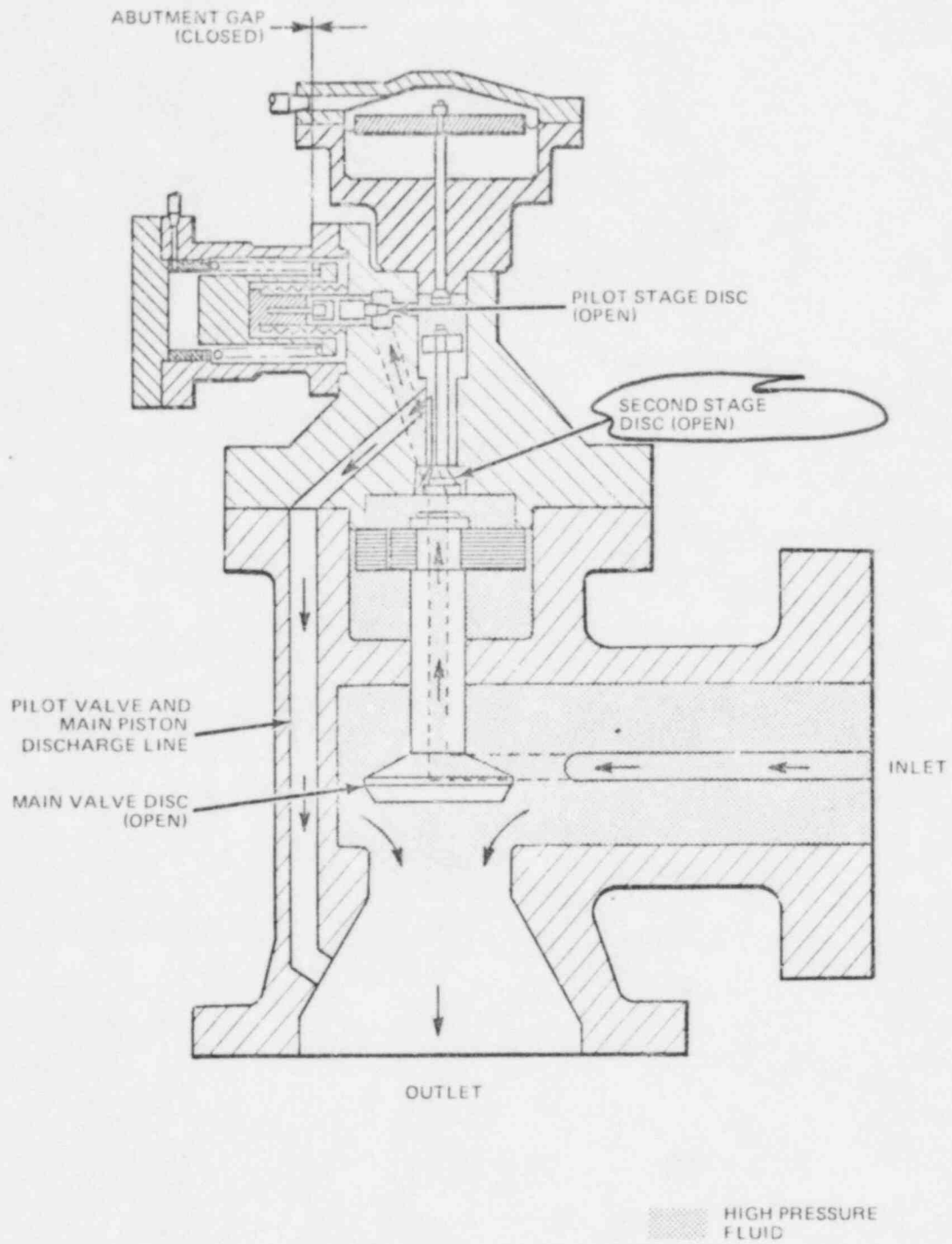


Figure 3. Valve Schematic (Open)



Commonwealth Edison

Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois 61242
Telephone 309/654-2241

DMB

NJK-83-355

October 5, 1983

J. Keppler, Regional Administrator
Office of Inspection and Inspection
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

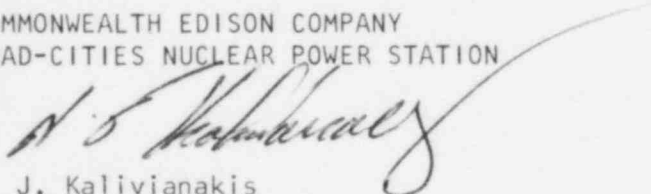
Reference: Quad-Cities Nuclear Power Station
Docket Number 50-254, DPR-29, Unit One
Appendix A, Sections 3.5.D and 6.6.B.2.b

Enclosed please find Reportable Occurrence Report Number R0 83-35/03L-0
for Quad-Cities Nuclear Power Station.

This report is submitted to you in accordance with the requirements of
Technical Specification 6.6.B.2.b, as a condition leading to plant
shutdown required by a limiting condition for operation.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION


N. J. Kalivianakis
Station Superintendent

NJK:JRW/bb

Enclosure

cc B. Rybak
A. Morrongiello
INPO Records Center

OCT 13 1983

IEJ 11