



Commonwealth Edison
Quad-Cities Nuclear Power Station
Post Office Box 216
Cordova, Illinois 61242
Telephone 309/654-2241

8-12-75

NJK-75-406

August 8, 1975

Director of Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: Quad-Cities Nuclear Power Station
Docket No. 50-265, DPR-30, Unit 2
Appendix A, Sections 1.0.A.2, 3.5.C.1, 6.6.B.1.a

Enclosed please find Abnormal Occurrence Report No. 50-265/75-27 for Quad-Cities Nuclear Power Station. This occurrence was previously reported to Region III, Directorate of Regulatory Operations by telephone on July 29, 1975 and to you and Region III, Directorate of Regulatory Operations by telecopy on July 29, 1975.

This report is submitted to you in accordance with the requirements of Technical Specification 6.6.B.1.a.

Very truly yours,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis
Station Superintendent

NJK/LLH/rhb

cc: Office of Inspection and Enforcement
G. A. Abrell

50-265
inquiry

8306160270 750808
PDR ADOCK 05000265
S PDR

COPY SENT REGION

8481

REPORT NUMBER: A0-50-265/75-27

REPORT DATE: August 8, 1975

OCCURRENCE DATE: July 29, 1975

FACILITY: Quad-Cities Nuclear Power Station
Cordova, Ill. 61242

IDENTIFICATION OF OCCURRENCE:

Unit 2 High Pressure Coolant Injection (HPCI) system pump low flow.

CONDITIONS PRIOR TO OCCURRENCE:

Unit 2 was operating steady state at 603 Mwe.

DESCRIPTION OF OCCURRENCE:

At 4:45 AM on July 29, 1975, the Unit 2 High Pressure Coolant Injection (HPCI) monthly surveillance was being performed. The operator was only able to attain a pump flow rate of 4860 gallons per minute instead of the required flow rate of 5000 gallons per minute. The Reactor Core Isolation Cooling System (RCIC), Low Pressure Coolant Injection (LPCI) mode of the Residual Heat Removal System (RHR), both Core Spray Loops, and the Automatic Pressure Relief system were tested and proven operable.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

EQUIPMENT FAILURE - Improper pinning of the pilot valve lever arm during initial installation is designated as the apparent cause of this occurrence. It was determined that the speed control linkage was not properly restrained to maintain the adjustment necessary to allow the turbine to operate at high enough speed. This lower than adequate speed caused the pump to deliver slightly less than its' required flow. A General Electric Company field representative, along with station personnel, carried out the investigations and determined that the lever arm was out of adjustment and was thus limiting turbine speed.

The similar linkage on the Unit 1 HPCI turbine was inspected and found to be properly pinned.

ANALYSIS OF OCCURRENCE:

The safety implications were minimal since the flow rate was only 3% less than the required 5000 gpm flow rate. Additionally the RCIC, LPCI mode of RHR, Core Spray loops A&B, and the Automatic Pressure Relief system were all operable.

At no time was there any undue safety hazard present to the public or plant personnel.

CORRECTIVE ACTION:

The corrective action was to prove RCIC, LPCI Mode of RHR, Core Spray loops A&B, and the Automatic Pressure Relief system operable.

Corrective action to prevent reoccurrence was to adjust the lever arm on the pilot valve to allow a turbine maximum speed of 4350 RPM and the motor gear unit high speed stop was adjusted to 4300 RPM. The HPCI unit was then retested and proven operable at 11:10PM, July 29, 1975. Flows rates in excess of 5000 gpm were achieved.

FAILURE DATA:

There have been no similar low flow occurrences in the past at Quad-Cities. Increased HPCI turbine capability should preclude any further occurrences of this type.