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

NJK-75-379

Date: July 25, 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, 3.1,6.6.B.1.A

Enclosed please find Abnormal Occurrence Report No. 50-265/75-23 for Quad-Cities Nuclear Power Station. This occurrence was previously reported to Region 111, Directorate of Regulatory Operations by telephone on July 18, 1975 and to you and Region 111, Directorate of Regulatory Operations by telecopy on July 18, 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/KML/lp

cc: Region 111, Directorate of Regulatory Operations
J. S. Abel

50-265, inquiry

Report Number AO-50-265/75-23

Report Date: July 25, 1975

Occurrence Date: July 18, 1975

Facility: Quad-Cities Nuclear Power Station
Cordova, Illinois 61242.

Identification of Occurrence:

High drywell pressure switch 2-1001-89B failed to operate.

Conditions Prior to Occurrence:

Unit 2 was in the run mode with core thermal power of 1968 MW_t and electrical output of 605 MW_e.

Description of Occurrence:

While performing routine surveillance on July 18, 1975, at approximately 9:30 a.m., it was discovered that pressure switch 2-1001-89B (High drywell pressure) would not operate. Instrument maintenance personnel tested and found the three remaining switches operable.

The existing switch was replaced with a new spare, but this switch failed to operate properly also. Further investigation revealed that the pressure pulsation dampener located on the inlet to the pressure switch had become fouled with dirt and scale. The dampener was cleaned and at approximately 1:00p.m. July 18, 1975 pressure switch 2-1001-89B was restored to service.

Designation of Apparent Cause of Occurrence:

Equipment Failure

The apparent cause of this occurrence is designated as equipment failure. The pressure pulsation dampener performs its functions through the use of small orifices that limit the rate at which the metered fluid can pass. Only a very small amount of scale and crud was needed to plug the orifices. This crud, in effect, isolated the pressure switch from the rest of the system.

Analysis of Occurrence:

Pressure switch 2-1001-89B is one of four switches operating contacts in a logic sequence designed to give a high drywell pressure signal to Reactor Protection Systems. The "one-out-of-two-twice" logic gives not only a means of testing and maintaining the circuits, but also provides redundancy in the event that one switch or contact fails. Technical Specification 3.1 allowes for plant operation with a failed sensor for brief periods while maintenance is performed. In this case, the other three pressure switches were operable and the logic sequence would have supplied the appropriate high pressure signal; therefore, consequences or potential consequences from the

standpoint of public health and safety were minimized. No plant personnel were injured and there was no release of radioactive material as a result of this abnormal occurrence.

Corrective Action:

The corrective action taken was to clean the dampener, and test the remaining switches.

Failure Data:

No previous failures of this type have occurred; therefore, there are no safety implications based on cumulative experience related to this occurrence.