(7-77)	LICENSEE EVENT REPORT
	CONTROL BLOCK
	LICENSEE CODE 14 0 0 0 - 0 0 0 - 0 0 0 3 4 1 1 1 1 1 4 57 CAT 58 5
	REPORT L 6 0 5 0 0 2 5 4 0 0 9 2 3 8 3 8 1 0 2 0 8 3 9 SOURCE 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80
0 2	EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10) L At 0040 hours on September 23, 1983, while inerting the Primary Containment during [
03	a Unit One startup, the containment oxygen concentration was not reduced to less
0 4	than 5% by weight within 24 hours as specified in Technical Specification 3.7.A.5.b.
05	The maximum oxygen concentration after 24 hours was 4% by volume and the Reactor
0 6	power was approximately 75%. Therefore, the minimal oxygen production in the
07	Reactor and the low concentration in the Containment would have minimized the
08	potential for a hydrogen combustion
7 8 0 9 7 8	SYSTEM CAUSE CAUSE COMPONENT CODE COMP CODE SUBCODE COMPONENT CODE SUBCODE SUB
	Image: Description of the second s
	ACTION FUTURE EFFECT SHUTDOWN HOURS 22 ATTACHMENT NPRD-4 PRIME COMP TAKEN ACTION ON PLANT METHOD HOURS 22 ATTACHMENT SUBMITTED FORM SUB. SUPPLIER MANUFACTURER X 18 Z 19 Z 20 Z 21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10	The cause of this occurrence is partially attributed to the sample response time of
11	compression Chamber. These problems were approvated by a delay in the initiation of
1 2	the inertion process by Operating personnel. This occurrence will be discussed
13	be investigated.
1 4	90
T S	ACILITY STATUS SPOWER OTHER STATUS 30 METHOD OF DISCOVERY DISCOVERY DESCRIPTION 32 C 28 0 6 9 29 NA B 31 Operator Observation
A0 RE	CTIVITY CONTENT LEASED OF RELEASE AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36 NA
1 7	PERSONNEL EXPOSURES 39 NUMBER TYPE 0 0 0 0
	PERSONNEL INJURIES 41 B0 NUMBER DESCRIPTION (41) NA
7 8	A DESCRIPTION NA
2 8	PUBLICITY (45) 8310270404 831020 NBC USE ONLY
20	PDR ADOCK 05000254
	NAME OF PREPARER A Misak PHONE 309-654-2241, ext 194

- I. LER NUMBER: LER/RO 33-37/03L-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:

Unit One was placed in the RUN mode at 0040 hours on September 22, and Primary Containment inerting commenced according to QOP 1600-20. At 1640 hours, the oxygen concentration monitor on the 912-7 panel indicated that the Drywell oxygen concentration was 4.4 percent by volume; therefore, inerting of the Suppression Chamber was initiated. At 0012 hours, on September 23, the oxygen concentration monitor indicated the Suppression Chamber oxygen concentration was at 4.4 percent. However, further inerting of the Drywell was required until 0110 hours when all oxygen concentration limits were met, approximately 30 minutes past the 24 hours limitation. A Drywell to Suppression Chamber differential pressure of 1.25 psid was established at 0155 hours. This is within the additional six hour time period allowed by Technical Specification 3.7.A.6.a(3).

At 1300 hours on September 23, 1983, during the performance of the weekly Oxygen Concentration surveillance, it was discovered the Suppression Chamber concentration had increased to 4.75 percent. It was suspected that air in-leakage from the dp compressor caused the increase in oxygen content. A nitrogen feed and bleed operation was immediately established until 1430 hours when the concentration limits were met.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The probability of the conditions existing to allow combustion of any hydrogen liberated if a gross metal-water reaction occurred during a Loss of Coolant Accident was small. This probability was small due to the fact that both the Drywell and the Suppression Chamber concentration had been reduced to the required limit 30 minutes after the 24 hour requirement. Also, since the unit was operating at approximately 75 percent power, the amount of disassociated oxygen being produced in the Reactor which could have been available for recombination in the event of a Loss of Coolant Accident was reduced from that being produced at full power. Therefore, the safety implications of this occurrence were minimal.

VII. CAUSE:

The cause of this occurrence is partially attributed to the sample response time of the monitoring instrumentation and a probable source of air in-leakage through the compressor used to maintain the differential pressure between the Drywell and Suppression Chamber. These problems were aggravated by a delay in the initiation of the inertion process by Operating personnel.

VIII. CORRECTIVE ACTION:

The immediate action taken was to continue the injection of nitrogen into the Primary Containment to reduce the oxygen concentration until the Technical Specification limits were met. Past inspections of the Drywell-Torus dp equipment have not identified the source of in-leakage during operation of this equipment. However, further inspections will continue until the problem is resolved. Also, Station personnel are considering the purchase of Helium leak detection equipment to aid in the search for the point of in-leakage. Finally, during the weekly Operating Department meeting, personnel were reminded of the importance of the containment inerting requirements necessary to meet the Technical Specification limitations.

Commonwealth Edison Quad Cities Nuclear Power Station 22710 206 Avenue North Cordova, Illinois 61242

Telephone 309/654-2241

NJK-83-379

October 20, 1983

J. Keppler, Regional Administrator Office of Inspection and Enforcement 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, Section 3.7.A.5.b

Enclosed please find Reportable Occurrence Report Number RO 83-37/03L-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, conditions leading to operation in a degraded mode permitted by a limiting condition for operation.

Respectfully,

COMMONWEALTH EDISON COMPANY QUAD-CITIES NUCLEAR POWER STATION

anely

N. J. Kalivianakis Station Superintendent

NJK:DGC/bb

Enclosure

cc B. Rybak A. Morrongiello INPO Records Center

OCT 2 4 1983

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