NRC FOR (7-77)	M 366 U. S. NUCLEAR REGULA	TORY COMMISSION
	LICENSEE EVENT REPORT	
	CONTROL BLOCK:	MATION)
	I L Q A D I Q 0 0 - 0 0 - 0 0 - 0 0 0 - 0 0 0 3 4 1) (5)
	REPORT L 6 0 5 0 0 0 2 5 4 7 0 2 1 4 8 3 8 0 3 0 9 SOURCE 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DA EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)	1833 TE 80
02	At 1255 hours, on February 14, 1983, a Group II Isolation occurred while	performing
03	maintenance on the Drywell high radiation monitors. The A0-1-1601-56 Su	ppression
0 4	Chamber Nitrogen Purge Valve, failed to isolate as required in Technical	
05	Specification 3.7.D.1. The inboard isolation valve, 1-1601-21, remained	closed
016	throughout the event; thus, Primary Containment integrity was maintained	at all
0 7	times. Safe Reactor operation was not affected as a result of this even	t]
08	9	80
	$\begin{array}{c} \begin{array}{c} \text{SUBCODE} \\ \text{CODE} \\ \text{SUBCODE} \\ \text{SUBCODE} \\ \end{array} \\ \begin{array}{c} \text{SUBCODE} \\ \text{SUBCODE} \\ \text{SUBCODE} \\ 11 \\ 11 \\ 12 \\ 12 \\ 12 \\ 12 \\ 13 \\ 13$	BEVISION
	17 REPORT NO. CODE TYPE	NO.
	ACTION FUTURE EFFECT SHUTDOWN TAKEN ACTION ON PLANT METHOD HOURS (22) SUBMITTED FORM SUB, SUPPLIER	32 COMPONENT MANUFACTURER
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	V 0 9 5 26
	CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)	the colonoid
10	The cause of this occurrence has been designated as equipment faiture of	the solenoid
11	pilot valve. No obvious problem could be identified when the valve was	bench
12	tested and inspected. The solenoid valve was replaced, cycled three tim	es, and the
13	Closure time was verified. To prevent spurious Group II Isolations, the monitors have been marked cautioning anyone from removing both radiation	radiation
14 7 8	monitors simultaneously.	80
15	ACILITY * POWER OTHER STATUS 30 DISCOVERY DISCOVERY DESCRIPTION	32
7 8 A 1 6	9 10 12 13 44 45 46 CIVITY CONTENT 12 13 13 14 45 46 CLEASED OF RELEASE AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 35 I Z (33) Z (34) NA NA NA	6
7 8	9 10 11 44 45 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)	80
1 7 7 8		80
18		
7 8	9 11 12 LOSS OF OR DAMAGE TO FACILITY (43) TYPE DESCRIPTION	80
1 9	NA 8303170379 830309	80
20	PUBLICITY SSUED DESCRIPTION 45 PDR ADOCK 05000254 NF SSUED DESCRIPTION 45 PDR	C USE ONLY
7 8	9 10 68 69 NAME OF PREPARER R Rustick PHONE: 309-654-22	80.5 41, ext 182

- I. LER NUMBER: LER/RO 83-07/03L-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 12:55 p.m., on February 14, 1983, a Group I! Isolation occurred when an Instrument Mechanic was investigating a problem in the ACAD-CAM High Rad Sensors on the 901-56 panel. With the RE 1-2419B High Rad Drywell Sensor removed, the Instrument Mechanic inadvertently caused the Group II Isolation by pulling out the RE 1-2419A High Rad Drywell Sensor.

At the 901-3 panel, the Operator noticed that the AO-1-1601-56, Torus Nitrogen Purge Valve, did not close. This condition was contrary to the requirements stated in Technical Specification 3.7.D.1. The AO-1-1601-21, Drywell Purge Valve, AO-1-1601-55, Nitrogen Purge Valve, and AO-1-1601-22, Torus/Drywell Vent Valve, were closed ensuring that Primary Containment integrity was maintained at all times satisfying Technical Specification 3.7.D.2.

An Operator was dispatched to investigate the problem. The valve still would not close. At 1:45 p.m., the same day, the valve closed by itself.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The A0-1-1601-56 valve is a Torus Nitrogen Purge Valve which is normally open when the unit is operating to provide a suction path from the Torus to the Drywell/Torus dP compressors. The inboard isolation valve, 1-1601-21, was closed at the time of the occurrence and remained closed until the 1601-56 valve was repaired. With the inboard isolation valve closed, Primary Containment integrity was maintained at all times. Thus, safe Reactor operation was not affected as a result of this event.

VII. CAUSE:

The cause of this occurrence has been designated as equipment failure. The reason for the valve not closing originally could not be determined. The solenoid valve was bench tested and inspected following removal. The valve operated property and no unusual wear was found in the internals. The solenoid pilot valve is manufactured by Versa Products, Model VGS-4422-U-10-31.

VIII. CORRECTIVE ACTION:

The solenoid operated pilot valve was replaced like-for-like on the same day. The valve was subsequently cycled three times and the closure time was within Technical Specification limits. The valve is cycled at least once every three months to verify operability, which is sufficient to identify any abnormalities. To prevent future unexpected Group II Isolation from occurring, the 901-56 panel has been marked cautioning anyone from removing the 1-2419A and B radiation monitors simultaneously.

There have been no previous failures of the AO-1-1601-56 valve or its associated solenoid pilot valve at Quad-Cities Station. There have been five prior failures of similar solenoid pilot valves. On four occasions the failures were due to rubber seal interferences in the solenoid cap, and in one instance, the solenoid coil failed.