

# LICENSEE EVENT REPORT

CONTROL BLOCK: \_\_\_\_\_ (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	1	L	Q	A	D	1	2	0	0	0	-	0	0	0	-	0	0	0	3	4	1	1	1	1	4	5
7	8	9	LICENSEE CODE					14	15	LICENSEE NUMBER					25	26	LICENSE TYPE					30	57	CAT	58		

CON'T

0	1	L	6	0	5	0	0	0	2	5	4	7	0	4	0	5	8	3	8	0	4	2	2	8	3	9
7	8	REPORT SOURCE		60	61	DOCKET NUMBER					65	69	EVENT DATE			74	75	REPORT DATE			80					

### EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | At 0136 hours on April 5, 1983, the Reactor Building and Control Room Ventilation

0 3 | Systems isolated and Standby Gas Treatment auto-started for no apparent reason. The

0 4 | isolation signal could not be reset. The ventilation systems tripped and the Stand-

0 5 | by Gas Treatment System auto-started as designed, thus meeting the requirements of

0 6 | Technical Specification 3.2.E. There was no potential for an uncontrolled release

0 7 | of radioactive material to the environment.

0	9	A	A	11	E	12	A	13	R	E	L	A	Y	X	14	A	15	Z	16			
7	8	SYSTEM CODE		9	10	CAUSE CODE	11	12	CAUSE SUBCODE			17	COMPONENT CODE			18	COMP SUBCODE		19	VALVE SUBCODE		20

17	LER/RO REPORT NUMBER	8	3	21	22	23	—	24	0	1	5	26	27	—	28	0	3	29	L	30	—	31	0	32
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER								
A		C		Z		Z		0000		Y		Y		N		G080								
33	34	35	36	37	40	41	42	43	44	47														

### CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The cause of this occurrence was a failure of relay coil 1701-100A. The failed coil

1 1 | caused the relay to trip in a fail-safe condition. The coil was replaced with a coil

1 2 | having a higher voltage rating. There have been past instances of coil failures in

1 3 | this type of relay. The relay will be replaced as cabinet space and outage time

1 4 | becomes available.

1	5	E	28	0	9	9	29	NA	30	A	31	Operator Observation	32				
7	8	FACILITY STATUS		% POWER			12	13	OTHER STATUS		44	METHOD OF DISCOVERY		45	DISCOVERY DESCRIPTION		80

1	6	Z	33	Z	34	NA	35	NA	36	
7	8	ACTIVITY CONTENT RELEASED OF RELEASE		AMOUNT OF ACTIVITY			44	LOCATION OF RELEASE		80

1	7	0	0	0	37	Z	38	NA	39	
7	8	PERSONNEL EXPOSURES NUMBER		TYPE		DESCRIPTION			13	80

1	8	0	0	0	40	NA	41	
7	8	PERSONNEL INJURIES NUMBER		DESCRIPTION			12	80

1	9	Z	42	NA	43	8305030333	830422	PDR	ADOCK	05000254	PDR	
7	8	LOSS OF OR DAMAGE TO FACILITY TYPE		DESCRIPTION			10					80

2	0	N	44	NA	45	68	69	NRC USE ONLY				80
7	8	ISSUED DESCRIPTION		DESCRIPTION			10					80

NAME OF PREPARER D G Clark PHONE: 309-654-2241, ext 244

- I. LER NUMBER: LER/RO 83-15/03L-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 April 5, 1983, at 0136 hours, the Reactor Building Ventilation System and the Control Room Ventilation System automatically isolated for no apparent reason. Attempts to reset the ventilation system isolation signal proved futile. Work Request Q25368 was written to investigate and repair the problem. All Technical Specification requirements were met due to the fact that the Standby Gas Treatment System auto-initiated and the Reactor Building and Control Room Ventilation Systems tripped.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The safety implications of this occurrence are minimal. The Reactor Building Ventilation System is designed to isolate on a high radiation signal from the Reactor Building ventilation exhaust duct radiation monitors or the fuel pool radiation monitors. The Standby Gas Treatment System will also auto-initiate on a high radiation signal. Both systems performed as they were designed; therefore, Secondary Containment integrity was maintained throughout the event.

VII. CAUSE:

The cause of this occurrence is designated as equipment failure. Upon investigation, it was found that the coil in relay 1701-100A, in panel 901-40, had overheated and failed. The 1701-100A relay is a normally energized relay. The coil failure caused the relay to drop-out to the fail-safe position, thus tripping the ventilation system.

The relay is a type CR120A relay manufactured by the General Electric Company. There have been past instances of overheated coils in this type of relay; the most recent of which is documented in LER/RO 83-10/03L-0.

VIII. CORRECTIVE ACTION:

The corrective action taken was to replace the coil in the 1701-100A relay with a coil having a higher voltage rating. This action will increase the reliability and the life of the coils. After the coil was replaced, the ventilation systems were reset, and the Standby Gas Treatment System was placed in STANDBY. As a result of Action Item Record 4-80-14, it was recommended that CR120A relays be replaced by the more reliable CR120B model relay. As cabinet space and outage time become available, this replacement will be accomplished.