NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

01 LICENSEE CODE: I L Q A D 1 (2) LICENSE NUMBER: 0 0 0 - 0 0 0 - 0 0 0 (3) LICENSE TYPE: 4 1 1 1 1 (4) CAT (5)

CON'T
01 REPORT SOURCE: L (6) DOCKET NUMBER: 0 5 0 0 0 2 5 4 (7) EVENT DATE: 0 4 3 0 8 2 (8) REPORT DATE: 0 5 2 1 8 2 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On April 30, 1982, the 1-1001-65C Residual Heat Remova: System (RHRS) Service Water Pump was taken out of service for preventative maintenance on the pump seal packing. During the maintenance, a significant amount of water was found in the bearing oil reservoir. There was insufficient water to cause any bearing damage due to loss of lubrication, but continued operation may possibly have resulted in further water inleakage and subsequent bearing damage. Thus, the pump was declared inoperable in order to perform corrective maintenance, and the Containment Cooling Mode of RHRS operability surveillance was successfully performed as required by Technical Specification 4.5.B.2. All modes of the RHRS could have performed their intended function at all times. Therefore, there was no affect on safety associated with this occurrence.

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP SUBCODE	VALVE SUBCODE
CE (11)	E (12)	B (13)	PUMPXX (14)	B (15)	Z (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
82	—	009	/	03	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP SUPPLIER	COMPONENT MANUFACTURER
A (18)	Z (19)	Z (20)	Z (21)	0000	Y (23)	Y (24)	N (25)	I075 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

Water apparently seeped into the oil reservoir from an adjacent, leaking seal packing. This leakage was determined to be due to normal packing wear. The oil in the bearing oil reservoir was changed and the pump seals were repacked. The 1-1001-65C RHRS Service Water Pump was tested operable and returned to service at 2210 hours on April 30, 1982.

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
E (28)	080 (29)	NA	B (31)	Observation

ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION (39)
000 (37)	Z (38)	NA

PERSONNEL INJURIES

NUMBER	DESCRIPTION (41)
000 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
Z (42)	NA

PUBLICITY

ISSUED	DESCRIPTION (45)
N (44)	NA

8206070598 820521
PDR ADOCK 05000254
S PDR

NRC USE ONLY

NAME OF PREPARER R. Buss PHONE 309-654-2241, ext. 181

I. LER NUMBER: LER/RO 82-09/03L-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 29, 1982, the 1-1001-65C Residual Heat Removal System (RHRS) Service Water Pump was operated for the Mechanical Maintenance Department to observe pump leakage prior to taking the pump out of service for adjustment of its pump seal packing. At 0330 hours on April 30, 1982, the pump was removed from service, and preventative maintenance was begun. All appropriate surveillances of the Containment Cooling Mode of the RHRS had been successfully completed as required by Technical Specification 4.5.B.2., prior to removing the pump from service.

During the maintenance of the pump, a substantial amount of water was found in the RHRS Service Water Booster Pump outboard bearing oil reservoir. It was determined that extensive operation may have resulted in bearing damage. This occurrence was discussed with the Nuclear Regulatory Commission site representative, and a decision was made to submit a Licensee Event Report based on the potential for the "C" RHRS Service Water Pump's failure.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The water in the oil was not of sufficient quantity to cause any excess wear on the bearings as a result of decreased bearing lubrication. There was, however, a possibility that long term operation of the pump may have resulted in additional dilution of the oil and subsequent bearing damage.

The Containment Cooling Mode of RHRS consists of two loops; each loop having two 100 percent capacity service water pumps. Therefore, loss of the "C" RHRS Service Water Pump would not have prevented the Containment Cooling Mode of RHRS from performing its designed function. There was no affect on the safe operation of the unit as a result of this occurrence.

Technical Specification 3.5.B.2. allows Reactor operation if the affected pump is made operable within 30 days and as long as the active components of the Containment Cooling Mode of RHRS remain operable.

VII. CAUSE:

The water in the bearing oil reservoir had apparently seeped in from the adjacent leaking pump packing. The condition of the pump seal packing was a result of normal wear.

VIII. CORRECTIVE ACTION:

The immediate corrective action consisted of repacking the pump and changing the bearing oil. The "C" RHRS Service Water Pump was returned to service and tested operable at 2210 hours, on April 30, 1982. The pump was manufactured by Ingersol Rand, Model 8GT. The bearing was manufactured by SKF Bearings. A modification has been initiated to install bearing seals on the pump end of the bearing. This will prevent water from entering the bearing and diluting the oil, thus prolonging the life and enhancing the operation of the bearing.