

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
LaSalle County Station Unit 1DOCKET NUMBER (2)
0 5 0 0 0 3 1 7 3 1 OF 0 3TITLE (4)
Inboard Feedwater Check Valve LLRT FailureEVENT DATE (5)
MONTH DAY YEAR
0 3 2 8 8 5 8 5
LER NUMBER (6)
SEQUENTIAL NUMBER
0 3 2
REVISION NUMBER
0 0
REPORT DATE (7)
MONTH DAY YEAR
0 4 2 4 8 5
OTHER FACILITIES INVOLVED (8)
FACILITY NAMES
NA
DOCKET NUMBERS
0 5 0 0 0 0OPERATING MODE (9)
3
POWER LEVEL (10)
0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)
20.402(b) 20.406(c) 80.73(a)(2)(iv) 73.71(b)
20.406(a)(1)(i) 80.38(a)(1) 80.73(a)(2)(v) 73.71(c)
20.406(a)(1)(ii) 80.38(c)(2) 80.73(a)(2)(vi) OTHER (Specify in Abstract below and in Text, NRC Form 306A)
20.406(a)(1)(iii) X 80.73(a)(2)(ii) 80.73(a)(2)(vii)(A)
20.406(a)(1)(iv) 80.73(a)(2)(viii)(B)
20.406(a)(1)(v) 80.73(a)(2)(ix)LICENSEE CONTACT FOR THIS LER (12)
NAME
Randy S. Dus, extension 324
TELEPHONE NUMBER
AREA CODE
8 1 5 3 5 7 - 6 7 6 1COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)
CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NRCDS
B S J I S V A 3 9 1 YSUPPLEMENTAL REPORT EXPECTED (14)
YES (If yes, complete EXPECTED SUBMISSION DATE) X NO
EXPECTED SUBMISSION DATE (15)
MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On March 28, 1985, while Unit 1 was in Hot Shutdown, an LLRT was performed on the "B" Inboard Feedwater Check Valve, 1B21-F010B. The leakage was found to be in excess of Technical Specification limits.

The soft seat material was found to be deteriorated slightly which resulted in a less than adequate sealing surface. It is believed, however, that gross leakage from the vessel would have been prevented in the event of a line break.

The unit was brought to Cold Shutdown so that maintenance work could be performed. The soft seat material was replaced with a like-for-like soft seat. The "A" Feedwater Check Valve was also repaired at this time. After the work was completed, a successful LLRT was performed.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
LaSalle County Station Unit 1	0 5 0 0 0 3 7 3 8 5	-	0 3 2	-	0 0	0 2	OF 0 3

TEXT (If more space is required, use additional NRC Form 366A's) (17)

I. EVENT DESCRIPTION

On March 28, 1985, while Unit 1 was in Hot Shutdown, a Local Leak Rate Test was performed on the 1B21-F010B, Inboard Feedwater (SB) Check Valve. The leakage was found to be 409 scfh thus exceeding the total containment (NH) leakage limit of .6 La (231.4 scfh) per Technical Specification 3.6.1.2.

II. CAUSE

Upon initial inspection, the valve disc was found to be centered correctly within the valve body. However, the "soft seat" material (Ethylene Propylene) was observed to be slightly deteriorated. This resulted in a less than adequate sealing surface thus causing the leakage.

III. PROBABLE CONSEQUENCES

The feedwater lines between the Inboard and Outboard Check Valves, as well as the valves themselves, are designed and constructed so as to preclude the possibility of a credible line break. It is therefore believed that the Inboard Feedwater Check Valve would adequately serve its original design function of preventing a significant loss of vessel inventory in the event of a feedwater line break.

Each feedwater line still has two isolation valves, 1B21-F032A/B, Outboard Feedwater Check, and 1B21-F065A/B, Upstream Feedwater Injection. Each of these valves meet the requirements of Appendix J to 10CFR50 criteria as containment isolation valves. A successful leak rate test was last performed on each of these valves in September of 1983.

IV. CORRECTIVE ACTION

Immediate action was taken to bring the unit to Cold Shutdown status so that maintenance work could be performed. The "B" feedwater line was manually isolated and repairs were made under Work Request L47804. The "soft seat" was replaced with a like-for-like "soft seat", however, the replacement seats were not ground as had been done in the past. Also, locking tabs were welded to the disc so as to prevent the hinge pin bushings from rotating or pulling out of the disc. This has caused valve disc to valve body misalignment problems in the past.

In addition, the "A" Inboard Feedwater Check Valve was disassembled so that an inspection could be made of its soft seat. It too showed signs of deterioration and Work Request L47803 was generated to have it replaced with a new seal, like-for-like. Upon completion of the work, Local Leak Rate Tests were satisfactorily performed on each Inboard Feedwater Check Valve.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
LaSalle County Station Unit 1	0 5 0 0 0 3 7 3	8 5	- 0 3 2	- 0 0	0 3	OF	0 3

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IV. CORRECTIVE ACTIONS (CONTINUED)

It has been shown by past experience that these "soft seats" have lasted in excess of seven months without Local Leak Rate Test failures due to "soft seat" deterioration. Several types of "soft seats" are undergoing testing to obtain a qualified "soft seat" which will last at least one cycle. (AIR #373-100-83-34102)

An attempt will be made to determine the failure mechanism of the "soft seats" which were removed from these valves. (AIR #373-200-85-00061)

Further investigations of long term corrective actions are also being pursued. (AIR #373-200-85-00062)

V. PREVIOUS OCCURRENCES

Several failures of the Feedwater Check Valves have occurred in the past: LER's 373/83-107/03L-0, 83-146/03X-1, 84-012, and 84-064.

VI. NAME AND TELEPHONE OF PREPARER

Randy S. Dus, 815/357-6761, extension 324.



Commonwealth Edison
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April 24, 1985

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Dear Sir:

Reportable Occurrence Report #85-032-00, Docket #050-373 is being submitted to your office in accordance with 10CFR 50.73.

for R.D. Bialke
G. J. Diederich
Superintendent
LaSalle County Station

GJD/MLD/kg

Enclosure

xc: NRC, Regional Director
INPO-Records Center
File/NRC

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