

## LICENSEE EVENT REPORT

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

0 1 1 1 L L S I C 1 2 0 10 - 10 10 10 10 10 - 1 0 0 3 4 1 1 0 0 0 4 5  
8 9 14 15 25 26 30 37 CAT 58CONT  
0 1  
8  
REPORT SOURCE L 8 0 5 10 10 10 13 17 13 7 1 1 1 0 9 8 3 2 0 2 2 1 18 14 9  
60 61 68 69 74 75 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On Nov. 9, 1983, with Unit-1 shutdown for a planned outage, Local Leak Rate Tests were performed on the inboard feedwater check valves (1B21-F010A/B). It was determined that the Tech. Spec. 3.6.1.2. limit of .6 La (231.4 SCFH) was exceeded. The Feedwater lines still have two isolation valves in each line which meet the requirements of Appendix J to 10CFR50 criteria as containment isolation valves. The feedwater lines and check valves are designed and constructed in accordance with standard review plan 3.6.2-10 so as to preclude the possibility of a credible line break.

0 2  
0 3  
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7 8 9

SYSTEM CODE C H 11  
CAUSE CODE B 12  
CAUSE SUBCODE B 13  
COMPONENT CODE V A L V E X 14  
COMP. SUBCODE C 15  
VALVE SUBCODE A 16  
EVENT YEAR 8 3  
SEQUENTIAL REPORT NO. 1 4 6  
OCCURRENCE CODE 0 3  
REPORT TYPE X  
REVISION NO. 1  
LER/RO REPORT NUMBER 17  
ACTION TAKEN A 18  
FUTURE ACTION X 19  
EFFECT ON PLANT Z 20  
SHUTDOWN METHOD Z 21  
HOURS 0 0 0 0 22  
ATTACHMENT SUBMITTED Y 23  
NPRO-4 FORM SUBM. N 24  
PRIME COMP. SUPPLIER A 25  
COMPONENT MANUFACTURER A 3 9 1 26

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The leakage was a result of gaps found on the perimeter of the disc seal material.  
1 1 These gaps appeared at the seam, or "vulcanized" points of the seal. Alignment problems  
1 2 were identified that would have prevented the discs from closing squarely against the  
1 3 seal. The Mfr. is supplying LSCS with "one piece" seals, & the alignment problems are  
1 4 being resolved. Other corrective action outlined in confirmatory letter from J. Keppler  
dated 11-28-83.

7 8 9

FACILITY STATUS B 28  
% POWER 0 0 0 29  
OTHER STATUS NA 30  
METHOD OF DISCOVERY C 31  
DISCOVERY DESCRIPTION LLRT 32  
ACTIVITY RELEASED Z 33  
CONTENT Z 34  
AMOUNT OF ACTIVITY NA 35  
LOCATION OF RELEASE NA 36  
PERSONNEL EXPOSURES NUMBER 0 0 0 37  
TYPE Z 38  
DESCRIPTION NA 39  
PERSONNEL INJURIES NUMBER 0 0 0 40  
DESCRIPTION NA 41  
LOSS OF OR DAMAGE TO FACILITY TYPE 42  
DESCRIPTION NA 43  
PDR AD0CK 05000373  
S PDR  
PUBLICITY ISSUED N 44  
DESCRIPTION NA 45  
NRC USE ONLY  
8404030083 840221  
PDR AD0CK 05000373  
S PDR  
Randy Dus  
PHONE: 815/357-6761

- I. LER NUMBER: 83-146/03X-1
- II. LASALLE COUNTY STATION: Unit 1
- III. DOCKET NUMBER: 050-373
- IV. EVENT DESCRIPTION:

On November 9, 1983, with Unit One shutdown for a planned outage, Local Leak Rate Tests were performed on the inboard feedwater check valves (1B21-F010A/B). It was determined that the Technical Specification 3.6.1.2 Limit of .6 La (231.4 SCFH) was exceeded.

V. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The feedwater lines still have two isolation valves in each line which meet the requirements of Appendix J to 10CFR50 criteria as containment isolation valves.

The feedwater lines between the inboard and outboard check valves as well as the valves themselves are specially designed and constructed in accordance with Standard Review Plan 3.6.2-10 and ASME Section 3, so as to preclude the possibility of a credible line break between the check valves. Therefore, it is believed that the check valves would serve their original procured function of preventing a significant loss of vessel inventory in the event of a feedwater line break.

It is, therefore, believed that no immediate safety hazards existed, and that the plant was maintained in a safe condition at all times.

VI. CAUSE:

The subject valves are tilting disc check valves manufactured by the Anchor Darling Company. It was determined that the excessive leakage was a result of gaps found on the perimeter of the disc seal material, one about one-half inch long and the other about one and one half inches in length. These gaps appeared at the seam, or "vulcanized", points of the seal. It was also noticed that one of the seal's material appeared to be hardened slightly with multiple minute cracks. In addition, alignment problems were identified that would have prevented the discs from closing squarely against the seal.

VII. CORRECTIVE ACTION:

Immediate action was taken to repair the valves. The valve manufacturer (Anchor-Darling) is now supplying LSCS with new molded (one piece) seals as was used in the original design. Also, a representative of the Anchor-Darling Co. has been on-site to resolve the alignment problems.

As of 11-30-83, an acceptable Local Leak Rate Test had been performed on 1B21-F010B after a molded (one piece) seal was installed and the disc to hinge pin horizontal clearance was adjusted to within Anchor-Darling specifications. Work is progressing on 1B21-F010A to install a molded seal and

VII. CORRECTIVE ACTION (Cont'd):

and to make more critical adjustments of the vertical positioning of the disc assembly with Anchor Darling Specifications. 1B21-F010A will be Local Leak Rate Tested when the above work is completed prior to startup.

Additional corrective actions to assure that the seal failures in these valves have been identified and the problems corrected are underway. A course of action to procure and install qualified seals in accordance with the requirements of Appendix B of 10CFR Part 50 are outlined in a Confirmatory Action Letter dated 11/28/83 from J. Keppler (NRC) to C. Reed (CECo).

Prepared by: Randy S. Dus



**Commonwealth Edison**  
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Marseilles, Illinois 61341  
Telephone 815/357-6761

*DmB*

March 13, 1984

James G. Keppler  
Regional Administrator  
Region III  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Dear Sir:

Reportable Occurrence Report #83-146/03X-1 Docket #050-373 is being submitted to your office to supersede previously submitted Reportable Occurrence Report #83-146/03L-0, in accordance with NUREG-0161, "Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File"; General Instruction No. 3.

G. J. Diederich  
Superintendent  
LaSalle County Station

GJD/GW/sjc

Enclosure

cc: Director of Inspection & Enforcement  
Director of Management Information & Program Control  
U.S. NRC Document Management Branch  
INPO-Records Center  
File/NRC

*MAR 29 1984*

*FE22 11*