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Nuclear Power Plant
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New York Power Authority

Harry P. Salmon, Jr.
Resident Manager

June 15, 1992
JAFP-92-0464

United States Nuclear Regulatory Commission
Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

SUBJECT: DOCKET NO. 50-333
LICENSEE EVENT REPORT: 92-027-00 - Check Valve 14AOV-13A Seat Leakage Exceeding Technical Specification Limit

Dear Sir:

This report is submitted in accordance with 10 CFR 50.73(a)(2)(i).

Questions concerning this report may be addressed to Mr. W. Verne Childs at (315) 349-6071.

Very truly yours,

HARRY P. SALMON, JR.

HPS:WVC:KA:lar

Enclosure

cc: USNRC, Region I
USNRC Resident Inspector
INPO Records Center

Acct No P064705490
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NRC FORM 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
EXPIRES 4/30/92
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
James A. FitzPatrick Nuclear Power Plant	0 5 0 0 0 3 3 3	1 OF 0 3

TITLE (4)
Check Valve 14AOV-13A Seat Leakage Exceeding Technical Specification Limit

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
0 5	1 6	9 2	9 2	— 0 2 7	— 0 0	0 6	1 5	9 2		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
W. Verne Childs, Senior Licensing Engineer	AREA CODE 3 1 5 — 3 4 9 - 6 0 7 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
X	B M	I S V	A 5 8 5	Y							

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 7	3 1	9 2

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

INTERIM REPORT

EIIS Codes are in []

The plant was shutdown and in the cold condition for maintenance and refuel. On 5/16/92, during valve leak rate surveillance testing, the core spray [BM] A isolation testable check valve (14AOV-13A) exhibited seat leakage in excess of the Technical Specification limit of 10 gpm at a hydrostatic pressure of 1,000 psig. The apparent cause for the excessive check valve leakage was valve binding caused by the packing being too tight. The valve was repaired by replacing the swing arm packing. The hinge pin bushings, which were slightly worn, were also replaced while the valve was disassembled. The valve will be retested to verify the adequacy of the repairs made. An evaluation of the adverse valve packing condition will be performed and an LER update submitted to address the specific findings.

INTERIM REPORT

EIIS Codes are in []

Description

During leak rate testing of the core spray [BM] A isolation testable check valve (14AOV-13A) on May 16, 1992, with the plant shutdown and in the cold condition for maintenance and refueling, seat leakage was determined to be in excess of the Technical Specification limit. Operating Technical Specification 4.7.A.2.d(1) requires the leakage rate for isolation valve 14AOV-13A to be less than 10 gpm when hydrostatically tested at 1,000 psig. During performance of the leak rate test, the check valve was unable to hold pressure using a hydro test pump producing 11.5 gpm at 1,100 psig. At the time of the test, with the drywell open for refueling, primary containment integrity was not required.

The valve involved is a 10-inch swing check manufactured by Atwood & Morrill. This type of valve, as used in our plant application, has exhibited problems during leak testing in the past when air was used as the test medium. This problem was corrected by changing to a hydrostatic test in 1978.

Cause

The apparent cause of the excessive seat leakage exhibited by isolation check valve 14AOV-13A was tight valve packing limiting the travel of the valve. The cause for the adverse valve packing condition will be evaluated and an update to this LER submitted to address the specific findings.

Analysis

The function of the core spray A isolation testable check valve is to restrict backflow in the A core spray line to prevent loss of reactor coolant outside the primary containment (drywell) in the event the core spray line breaks when the upstream containment isolation valves 14MOV-11A and -12A are open. Since the A core spray line containment isolation valves (14MOV-11A and -12A) were operable at all times, primary containment integrity and core spray low pressure piping overpressure protection was never compromised by the leaking check valve.

The excessive leakage by the isolation check valve constitutes a condition prohibited by Technical Specifications and is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).

Corrective Action

1. The valve was repaired by replacing the swing arm packing in accordance with the packing installation procedure. While the valve was disassembled, the hinge pin bushings (which were slightly worn) were also replaced.

2. The valve will be hydrostatically retested for leakage to verify the adequacy of the repairs.

3. An update to this LER will be submitted to address any corrective actions determined by the outcome of the valve packing evaluation.

Additional Information

Failed Components: 14AOV-13A

Previous Similar Events: No previous events involving failure of this valve (or similar valves in other systems) when subjected to hydrostatic seat leak testing have occurred.

A supplemental report will be submitted to provide the additional information obtained from the evaluation of the valve packing condition causing this event.