NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Washington Nuclear Plant - Unit 2	0 5 0 0 0 3 9 7	1 OF 0 3

TITLE (4)
Electro-Hydrualic Valve Actuator Failure

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 0 0 0
1 0	0 3	8 4	8 4	- 1 1 0	- 0 0	1 1	0 8	8 4		0 5 0 0 0

OPERATING MODE (9)	4	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)	X 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)	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
	AREA CODE
R. L. Koenigs, Compliance Engineer	5 0 9 3 7 7 - 2 5 0 1 Ext. 2279

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	V H	- 1 S V	I 2 0 6	N							

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On 10/3/84 two control room remote air intake valves, for Remote Air Intake #1, failed to close after being opened during a post-maintenance operability check of recent electrical circuit modifications. The inoperability resulted from a hydraulic cylinder seal failure in each electro-hydraulic valve actuator. The valve actuators were temporarily replaced with valve actuators from system valves that were currently inoperative for other reasons.

This event was determined reportable on 10/31/84.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Washington Nuclear Plant - Unit 2	0 5 0 0 0 3 9 7	8 4	— 1 1 0	— 0 0	0 2 OF 0 3

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

Plant Conditions

a) Power Level - 0%
b) Plant Mode - 4

Event

On 10/3/84, response of the Control Room Emergency Filtration Units was being tested following circuit modifications to automatic start signal inputs from associated radiation monitors. WOA-V-51A and WOA-V-52A failed to close at the conclusion of this testing.

This condition was judged to be not reportable as system operation was within Technical Specification limits. However, upon further analysis, on 10/31/84, this event was determined reportable on the following basis. Had the Plant been at power when this event occurred, there could have been a failure of this safety system to properly complete its safety function had certain accident conditions existed. It should be noted that the Plant was shutdown at time of this occurrence and no accident conditions existed.

Immediate Corrective Action

The valves were inspected and found to have small amounts of hydraulic fluid inside the dust cover which protects the valve stem. Each hydraulic system was flushed and refilled (refilling used approximately 1/2 quart more than was drained during the flush). The valves still failed to operate.

WOA-V-52B and WOA-V-52E, both associated with Remote Air Intake #2, were out of service due to failures of different portions of the valve actuator train. Valve actuators from these valves were then used to replace those of WOA-V-51A and WOA-V-52A. Valves 51A and 52A were returned to service, fully operational, approximately 20 hours after the original failure and before subsequent plant startup.

Further Corrective Action

- The Plant was aware of an approaching operating lifetime limitation on the seals involved. The anticipated corrective actions (e.g., obtaining training and spare parts) had been initiated prior to experiencing these failures. Those valves which need seal replacement had been identified and a program is in place to provide the needed repairs.

- All similar valve actuators were inspected for hydraulic fluid leakage with none found.

- The faulty valve actuators were returned to the vendor for repairs. Existing polyurethane seals will be replaced with viton seals.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Washington Nuclear Plant - Unit 2	0 5 0 0 0 3 9 7	8 4	— 1 1 0	— 0 0	0 3 OF 0 3

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

- o Vendor training on valve actuator seal replacement is being obtained for maintenance personnel.

- o At the completion of vendor repairs to WOA-V-51A and -52A valve actuators, all valve actuators were returned to their original locations.

Safety Significance

Both valve actuators failed in their designed "Fail Open" position, thus allowing transfer of control room pressurization mode following a high radiation initiation. A downstream, leak rate tested damper was available to prevent clorine intrusion if such an event occurred. The Plant was shutdown during this event and operation was consistent with Technical Specification requirements. This event did not affect the safety of Plant personnel or that of the public.

Washington Public Power Supply System
P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

Docket No. 50-397
November 8, 1984

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

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 84-110

Dear Sir:

Transmitted herewith is Licensee Event Report No. 84-110 for WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the item of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,

CM Powers for

J. D. Martin (M/D 927M)
WNP-2 Plant Manager

JDM:mm

Enclosure:
Licensee Event Report No. 84-110

cc: Mr. John B. Martin, NRC - Region V
Mr. A. D. Toth, NRC - Site (901A)
Ms. Dottie Sherman, ANI
INPO Records Center - Atlanta, GA

IE22
1/1