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 2

TITLE (4)
Spurious Control Room Emerg. Filtration System Actuation Due to CL Monitor Tape Depletion

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
0 2	0 9	8 6	8 6	— 0 0 1	— 0 0	0 3	0 3	8 6		0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
1	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
7 2	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
W. S. Davison, Compliance Engineer	AREA CODE 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	

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 February 9, 1986 a spurious actuation of the Control Room Emergency Filtration system occurred when the chlorine monitor in sample rack WOA-SR-15 (Rad Waste Building Outside Air Sample Rack 15) ran out of tape. The root cause was attributed to inadequate design in that no alarm function exists to warn of impending tape depletion. A contributing cause was the occurrence of a cognitive personnel error in that the procedure calling for addition of new tape was not followed. The tape was replaced and the Control Room Emergency Filtration System was returned to normal. These monitors are to be eliminated when the method of circulating water treatment is changed from gaseous chlorination to chemical addition of sodium hypochlorite.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Plant Conditions

a) Power Level - 72%
b) Plant Mode - 1

Event

On February 9, 1986, the chlorine detector on the inlet of the Control Room Ventilation System, WOA-SR-15, ran out of tape causing a Hi Chlorine signal to be generated which started the Control Room Emergency Filtration System. The paper tape in the detector is chemically treated to react with chlorine in the air. When the tape is depleted the last piece remains in the flow stream and becomes discolored as dirt and moisture accumulate. This discoloration was sensed as an increasing chlorine concentration which reached the alarm setpoint and actuated the emergency filtration system.

The root cause of this event was evaluated as inadequate design, in that the chlorine detection system does not provide an alarm for paper tape depletion which results in a spurious initiation of an ESF system. A contributing cause was the occurrence of a cognitive personnel error by a utility maintenance technician in that the procedure mandating periodic addition of new tape was not complied with.

Immediate Corrective Action

The tape in WOA-SR-15 was replaced, the alarm reset and the Control Room Emergency Filtration System returned to its normal condition.

Further Evaluation and Corrective Action

As a result of an engineering study, the method of circulating water treatment will be changed from gaseous chlorination to chemical addition of sodium hypochlorite. This design modification will result in removal of the requirement for the intake header chlorine detectors to automatically isolate the Control Room. The removal of the chlorine detectors will eliminate the problem of spurious ESF actuations caused by paper tape depletion. The utility maintenance technician involved in this event was counselled and reinstructed.

Safety Significance

This event carries no safety significance as there was no actual high chlorine concentration and all equipment operated correctly to place the Control Room Ventilation System in an isolation condition.

Similar Events

Refer to LERs 84-057, 84-093, 84-128, and 85-026.

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

Docket No. 50-397
Marcy 3, 1986

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

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 86-001

Dear Sir:

Transmitted herewith is Licensee Event Report No. 86-001 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.

This is the follow-up report to the verbal notification given at 0542 hours on February 9, 1986.

Very truly yours,

JW Baker for

C.M. Powers (M/D 927M)
WNP-2 Plant Manager

CMP:mt

Enclosure:
Licensee Event Report No. 86-001

cc: Mr. John B. Martin, NRC - Region V
Mr. R.C. Barr, NRC - Site (901A)
Ms. Dottie Sherman, ANI
INPO Records Center - Atlanta, GA
Mr. C.R. Bryant, BPA (M/D 399)

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