

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Washington Nuclear Plant - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 9 1 7	PAGE (3) 1 OF 0 1 3
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TITLE (4)
Isolation of Reactor Water Cleanup

EVENT DATE (8)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		
*				07	2	0	10	82			
									DOCKET NUMBER(S) 0 5 0 0 0		

OPERATING MODE (9) 1

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

POWER LEVEL (10) 0.42	20.402(b)	20.406(e)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	73.71(b)
	20.406(a)(1)(ii)	80.38(a)(1)	<input type="checkbox"/>	80.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(iii)	80.38(a)(2)	<input type="checkbox"/>	80.73(a)(2)(vii)	<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 368A)
	20.406(a)(1)(iv)	80.73(a)(2)(i)	<input type="checkbox"/>	80.73(a)(2)(viii)(A)	50.72(b)(2)(ii)
	20.406(a)(1)(v)	80.73(a)(2)(ii)	<input type="checkbox"/>	80.73(a)(2)(viii)(B)	
		80.73(a)(2)(iii)	<input type="checkbox"/>	80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME C.M. Powers, Reactor Engineering Supervisor	TELEPHONE NUMBER 510 931 7171-1251011
AREA CODE 510 931 7171-1251011	

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) Ext. 2996

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
B	QE	-I-FIT	R131619	N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR
11 0 01 84

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

During Plant operation, Reactor Water Cleanup System (RWCU) isolations occurred, due to erroneous RWCU high delta flow trips. (Isolation of RWCU is an ESF actuation.)

A total of three isolations occurred, one on 7/5/84 and two on 7/6/84. Prior to these trips, RWCU delta flow was functioning just below its trip setpoint (58.5 GPM).

These isolations were reported to the NRC at 2210 hours on 7/5/84 and twice on 7/6/84.

Four additional isolations occurred as follows: One on 7/31/84; two on 8/9/84; and one on 8/10/84. These were reported to the NRC at 1450 hours on 7/31/84, 0145 hours on 8/9/84 and 0414 hours on 8/10/84.

- *Event 1 7/05/84 (LER 84-072-0)
- Event 2 7/06/84 (LER 84-072-0)
- Event 3 7/31/84 (LER 84-072-1)
- Event 4 8/08/84 (LER 84-072-1)
- Event 5 8/10/84 (LER 84-072-1)

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		84	072	011	02	OF	03

TEXT (if more space is required, use additional NRC Form 388A's) (17)

Plant Condition

- Event 1 (7/05/84) Plant Mode - 1, Power Level - 42%
- Event 2 (7/06/84) Plant Mode - 1, Power Level - 42%
- Event 3 (7/31/84) Plant Mode - 2, Power Level - 5%
- Event 4 (8/08/84) Plant Mode - 2, Power Level - 1%
- Event 5 (8/10/84) Plant Mode - 2, Power Level - 4%

Event

On 7/5/84, a spurious High Delta Flow Trip actuated an NSSSS isolation signal which resulted in closure of RWCU-V-1 and RWCU-V-4. An inspection of the system piping determined that no actual leaks existed. The isolation signals for RWCU-V-1 and RWCU-V-4 were reset and the RWCU system was returned to service.

On 7/6/84, two (2) RWCU High Delta Flow Trips occurred and initiated a sequence of events identical to that described for the 7/5/84 isolation.

On 7/31/84, the RWCU system was rejecting flow to the main condenser, with delta flow above the trip setpoint (58.5 gpm) the high delta flow trip delay of 45 seconds was exceeded which actuated an NSSSS isolation signal, resulting in closure of RWCU-V-1 and RWCU-V-4. The operators were not aware that a high delta flow condition existed until the isolation took place, because the high delta flow annunciator actuates with the NSSSS isolation signal after the 45 second time delay. An inspection of the system piping determined that no actual leaks existed. The isolation signals for RWCU-V-1 and RWCU-V-4 were reset and the RWCU system was returned to service.

Further RWCU high delta flow trips occurred, two (2) on 8/8/84 and one (1) on 8/10/84, during flow rejection to the main condenser. The trips initiated a sequence of events identical to that described for the 7/31/84 isolation.

Immediate Corrective Action

The RWCU Delta Flow instruments were checked for proper calibration. The return to Reactor vessel transmitter RWCU-FT-41 was found to have inadequate response. The transmitter was replaced. The sensing lines for the blowdown flow transmitter RWCU-FT-15 were found partially filled. The sensing lines were refilled and vented at their high points.

Following the 7/31/84, 8/8/84 and 8/10/84 events the system piping was inspected with no leaks found. The isolation signals were reset and the RWCU system returned to service.

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

Future Corrective Action

Although instrument problems in the RWCU Delta Flow network have been identified and corrected (resulting in improved system performance), additional changes may be required.

The RWCU delta flow network was evaluated and found to be functional per design. It was noted that RWCU reject flow limits, to prevent high delta flow isolations, vary with RWCU inlet temperature. A letter has been issued to Plant operators providing information on interpreting observed indications. Also, the high delta flow annunciator circuit is being redesigned such that annunciator actuation takes place when the trip setpoint is reached, rather than at isolation.

Any further corrective actions and the results of those actions will be addressed in the supplement to this LER.

Safety Significance

The occurrence of these events did not affect the safety of the Plant or that of the public. The system functioned to isolate in accordance with its design basis.

Washington Public Power Supply System

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

Docket No. 50-397

August 24, 1984

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

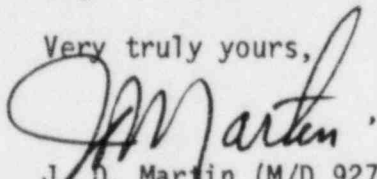
Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 84-072-01

Dear Sir:

Transmitted herewith is Licensee Event Report No. 84-072-01 for WNP-2 Plant. This report provides supplemental information to LER 84-072, Rev. 0, discusses subsequent events and provides additional information on actions taken to preclude recurrence.

This is the follow-up report to verbal notifications given at 1450 hours on July 31, 1984, 0145 hours on August 9, 1984 and 0414 hours on August 10, 1984.

Very truly yours,



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

JDM:mm

Enclosure:
Licensee Event Report No. 84-072-01

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

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