

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): Washington Nuclear Plant - Unit 2
DOCKET NUMBER (2): 050003971 OF 02

TITLE (4): Reactor Automatic Trip Due to High Pressure

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
05	13	84	84	044	000	06	12	84	
									DOCKET NUMBER(S) 050003971

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

OPERATING MODE (9): 1	20.402(b)	20.406(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10): 018	20.406(a)(1)(i)	50.36(e)(1)		50.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(ii)	50.36(e)(2)		50.73(a)(2)(vii)	<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)	50.72(b)(2)(ii)
	20.406(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)	
	20.406(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12):

NAME	TELEPHONE NUMBER
L.D. Kassakatis, Plant Compliance Engineer	510931771-125101
	Ext. 2201

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
B	JJ	ASV	C560	N					

SUPPLEMENTAL REPORT EXPECTED (14):

YES (If yes, complete EXPECTED SUBMISSION DATE): NO:

EXPECTED SUBMISSION DATE (15):

MONTH	DAY	YEAR

ABSTRACT (Limit to 400 spaces; if 400 spaces, state "fifteen single-space typewritten lines") (16)

During the Power Ascension Test Program the turbine was being rolled to synchronous speed. As the turbine speed approached the throttle valve to governor valve transfer speed of 1650 RPM, a pressure fluctuation in the Digital Electro-Hydraulic (DEH) system emergency trip header allowed leakage of DEH fluid past the closed seat of the bypass reset solenoid for MS-V-160C (one of the four main steam bypass valves). This leakage allowed DEH fluid to be redirected and caused MS-V-160C to move to a full open position. Subsequently the three remaining bypass valves compensated and went fully closed causing a High Pressure Reactor Trip.

Immediate corrective action was to close the Main Steam Isolation Valves (MSIV's) and shutdown the DEH pumps to allow closure of MS-V-160C. This was done to control Reactor Pressure Vessel (RPV) cooldown rate.

Further corrective action consisted of valve cleaning and lapping of the seats on all four bypass reset solenoid valves. Also a check valve was installed in the common emergency trip header to further isolate the bypass reset solenoid valves from header pressure fluctuations.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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

- a) Power Level - 18%
- b) Plant Mode - 1
- c) During Power Ascension Test Program

Event

On 5/13/84 as part of the Power Ascension Test Program the initial synchronization of the turbine generator was in progress. As the turbine speed approached the throttle valve to governor valve transfer speed of 1650 RPM, a fluctuation in the DEH System Control Emergency Trip Header allowed leakage of DEH fluid past the closed seat of the bypass reset solenoid for MS-V-160C (one of four Main Steam Bypass valves). This leakage allowed DEH fluid to be redirected and caused MS-V-160C to move to a full open position. Subsequently the three remaining bypass valves compensated for the initial decrease in steam pressure by cycling to the fully closed position. This resulted in a steam pressure increase to the Reactor High Pressure Trip.

Immediate Corrective Action

After the Reactor trip an initial attempt was made to close MS-V-160C via the manual control circuit. Also the DEH pumps were shutdown to reduce DEH fluid pressure and allow spring closure of MS-V-160C. To insure that Reactor pressure vessel cooldown rate was not exceeded the main steam isolation valves were closed.

Further Evaluation and Corrective Action

The Reactor was maintained in a shutdown condition to allow rework of the DEH system in an effort to preclude a similar event. The rework consisted of valve cleaning and lapping of the seats on all four bypass reset solenoid valves. Also a check valve was installed in the DEH System Control Emergency Trip Header which is common to all four bypass reset solenoid valves. The common check valve should further isolate the solenoid valves from header pressure fluctuations. Each individual line was already equipped with a check valve. During the rework of the bypass reset solenoid valve for MS-V-160C it was determined that the valve was not fully seated and the decision was made to rework the other three solenoid valves to preclude further problems. Improper seating was found on all four solenoid valves. After completing all rework the system was tested to verify that pressure fluctuations in the Control Emergency Trip Header would not cause unseating of the bypass reset solenoids and the resultant cycling of the main steam bypass valves.

Safety Significance

The DEH component failure resulting in a Reactor pressure excursion posed no threat to the health and safety of Plant personnel or to the public because the Plant Protection Systems functioned as designed. Also, Plant Operators took proper corrective action to isolate the failed component.

Washington Public Power Supply System

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

Docket No. 50-397
June 12, 1984

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

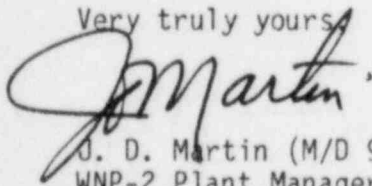
Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 84-044

Dear Sir:

Transmitted herewith is Licensee Event Report No. 84-044 for WNP-2 Plant. This report is submitted in response to the report requirements of Technical Specification Section 6.9.1.7 and discusses the item of noncompliance, corrective action taken, and action taken to preclude recurrence.

This is the follow-up report to the verbal notification given at 1218 hours on May 13, 1984.

Very truly yours,



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

JDM:mm

Enclosure:

Licensee Event Report No. 84-044

cc: Mr. John B. Martin, Administrator
Region V, Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
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Walnut Creek, California 94596
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11