

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

TITLE (4) Potential flooding of Control Room and other plant areas not analyzed

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	8	0	1	8	6	8	6	0	2	8	0	1	1	0	0	3	8	6	0	5	0	0	0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)

OPERATING MODE (9) 1	20.402(b)	20.406(e)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0, 9, 2	20.406(a)(1)(i)	50.38(a)(1)	50.73(a)(2)(v)	73.71(e)
	20.406(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vii)	X 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)	Part 21
	20.406(a)(1)(iv)	X 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 S. Washington, Compliance Engineer TELEPHONE NUMBER 510 931 771-1 2151011

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) Ext. 2080

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14) YES (If yes, complete EXPECTED SUBMISSION DATE) X NO

EXPECTED SUBMISSION DATE (15)

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

An evaluation of the A/E design criteria conducted by Generation Engineering determined that 1) a flooding analysis was not conducted during the design of a wet-sprinkler system added to the WNP-2 Control Room and 2) that the A/E flooding analyses requirements included only the Reactor Building and not other areas of the plant that contain safety-related equipment. Immediate corrective actions were taken to isolate the Control Room and activate an hourly fire watch patrol. The Control Room and other plant areas containing safety-related equipment and flooding sources are being evaluated for the effects of flooding.

This is also a special report filed per the requirements of 10CFR Part 21.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		8 6	0 2 8	0 1 0	2	OF	0 3

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

Plant Conditions

Power Level - 92%  
Plant Mode - 1 - Power Operation

Event

An NRC Fire Protection audit (WPBR-F-83-312) required the installation of seven automatic sprinklers in the Shift Manager's office, lunch room, bathroom, and janitor closet in the Control Room. The sprinkler design was not evaluated for flooding as part of the WNP-2 safe shutdown analysis. Each nozzle can provide sixty to seventy gpm and a flooding time of thirty minutes must be used in accordance with ANSI/ANS 58.2 - 1980. Only safety-related equipment areas located within the Reactor Building were evaluated for the effects of flooding. The Control Room is located in the Radwaste Building.

The lack of a flooding analysis for the Control Room was recognized by Generation Engineering on August 18, 1986 as a result of an NRC Fire Protection/Appendix R allegation inspection. This condition is considered reportable under 10CFR 50.73 (a)(2)(ii)(A).

The cause of this event is an error in the A/E design control process which failed to perform the required analysis at the time the sprinklers were designed.

Immediate Corrective Action

The sprinkler line in the Control Room was isolated and the Control Room areas put on an hourly fire watch patrol with extinguishers placed into each area as required by the Plant Technical Specifications.

Further Evaluation and Corrective Action

- o The piping and hanger design for the fire protection sprinkler system within the Control Room has been evaluated to ensure they are seismically designed and installed and therefore not subject to failure as a direct result of a seismic event. The automatic sprinkler heads have also been evaluated to ensure that they are seismically qualified. Flooding analysis based on ANSI/ANS 58.2 - 1980 has been performed for all water sources in the Control Room. The analysis has shown that flooding can occur due to a pipe crack. Nuclear Engineering Standard Seven (NES-7) is being changed to permit shutdown from the remote shutdown room in the event of flooding and spraying in the Control Room.
- o A detailed engineering flooding analysis of areas outside the Reactor Building which contain equipment essential to safe shutdown will be done. This analysis will include identification of flooding sources, calculation of flooding rates, and calculation of flooding levels. In addition, an independent verification will be performed to verify the accuracy of the analysis. The detailed flooding analysis will be completed by November 21, 1986, and the independent verification and documentation by February 20, 1987.

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

- o A letter will be transmitted to Burns and Roe Inc. to inform them of our 10CFR Part 21 determination and request their evaluation.

Safety Significance

- o A flood in the Control Room due to a pipe crack could potentially result in the loss of Control Room equipment needed to shutdown the plant. Appropriate actions are being implemented to shutdown the plant in the event of Control Room flooding or wetting.
- o A preliminary engineering evaluation of areas outside of the Reactor Building containing equipment essential to safe shutdown identified no potential flooding conditions that could prevent safe shutdown of the plant.

Similar Reports

LER 84-07, LER 85-001, LER 85-023 and LER 86-027



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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

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Docket No. 50-397

October 3, 1986

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

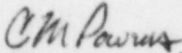
Subject: NUCLEAR PLANT NO. 2  
LICENSEE EVENT REPORT NO. 86-028-01

Dear Sir:

Transmitted herewith is Licensee Event Report No. 86-028-01 for WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR Part 21 and 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 1350 hours on September 17, 1986.

Very truly yours,

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

CMP:lc

Enclosure:  
Licensee Event Report No. 86-028-01

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

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