

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
 AUTH. NAME AUTHOR AFFILIATION
 ARBUCKLE, J. D. Washington Public Power Supply System
 POWERS, C. M. Washington Public Power Supply System
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-004-01: on 870407, discovered missed fire door
 surveillance & improper identification of fire seal
 penetrations. Caused by inadequate communication between
 two architect groups. Situation rectified. W/870717 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6
 TITLE: 50.73 Licensee Event Report (LER); Incident Rpt, etc.

NOTES:

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	NRR/PMAS/ILRB	1 1		NRR/PMAS/PTSB	1 1
	REG FILE 02	1 1		RES DEPY GI	1 1
	RES TELFORD, J	1 1		RES/DE/EIB	1 1
	RGN5 FILE 01	1 1			
EXTERNAL:	EG&G GROH, M	5 5		H ST LOBBY WARD	1 1
	LPDR	1 1		NRC PDR	1 1
	NSIC HARRIS, J	1 1		NSIC MAYS, G	1 1

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Washington Nuclear Plant - Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 9 7										PAGE (3) 1 OF 0 5									
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TITLE (4) Missed Fire Door Surveillance and Improper Identification of Fire Seal Penetrations																			
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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 4	0 7	8 7	8 7	0 0 4	0 1 0	7 1	7 8	7 8						0 5 0 0 0 0 0 0 0 0 0 0					

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 3: (Check one or more of the following) (11)																	
POWER LEVEL (10)		20.402(b)				20.405(a)				00.734(a)(2)(iv)				72.71(b)					
0 0 0		20.405(a)(1)(i)				00.30(a)(1)				00.734(a)(2)(v)				72.71(a)					
		20.405(a)(1)(ii)				00.30(a)(2)				00.734(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 308A)					
		20.405(a)(1)(iii)				00.734(a)(2)(i)				00.734(a)(2)(vii)(A)									
		20.405(a)(1)(iv)				00.734(a)(2)(ii)				00.734(a)(2)(vii)(B)									
		20.405(a)(1)(v)				00.734(a)(2)(iii)				00.734(a)(2)(viii)									

LICENSEE CONTACT FOR THIS LER (12)										TELEPHONE NUMBER									
NAME J.D. Arbuckle, Compliance Engineer										AREA CODE 5 0 1 9 3 1 7 1 7 + 1 2 1 1 1 5									

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	

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)

As the result of performing a Technical Specification surveillance and subsequent review, during the period of April 7-14, 1987, a Plant System Engineer discovered that 1) two fire seal penetrations were not sealed as required by the Plant Technical Specifications, and 2) one fire door had not been included in Technical Specification surveillance procedures.

The two unsealed penetrations were immediately placed on the hourly fire tour and Maintenance Work Requests (MWRs) were written to have the penetrations sealed. The fire door was incorporated into plant surveillance procedures and verified to be locked and operable.

The cause of this event has been determined to be inadequate communication between two Architect Engineer (Burns and Roe, Inc.) groups during the design and construction phase of the plant. This led to incorrect design basis information being used in procedure preparation.

Accordingly, an independent engineering review by the Supply System is currently being completed to ensure that all Technical Specification fire doors, barriers and penetrations are properly identified. At the completion of this review, a supplemental report will be submitted.

(Abstract continued on page 2)

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PDR ADOCK 05000397
S PDR

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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TEXT (If more space is required, use additional NRC Form 368A's) (17)

Supplement to Original Abstract

It was determined from the now completed independent engineering review that two additional penetrations were not sealed as required by the Plant Technical Specifications. These penetrations were placed on the hourly fire tour and MWRs were written to have them sealed.

Plant Conditions

- a) Power Level - 0%
- b) Plant Mode - 4 (Cold Shutdown)

Event Description

In November, 1986 during a review of the Fire Protection Plan, the Plant System Engineer noted some apparent discrepancies. Accordingly, to determine the validity of those potential discrepancies the System Engineer requested a formal engineering review. In the process of performing this review, it was discovered that the drawings the Supply System had been using as the base design documents were incomplete. The drawings were incomplete because of an apparent lack of communication between two separate Architect Engineer (Burns and Roe, Inc.) groups responsible for performing 10CFR50, Appendix R reviews, and Fire Barrier analyses. The drawings used by the Supply System were provided by the Fire Barrier Analysis Group. The assumption was made by the Supply System that the Fire Barrier Analysis Group properly communicated with the 10CFR50, Appendix R, Review Group during the preparation of those drawings. However, the assumption was incorrect and, as a result, the base drawings were incomplete. Also, during this review process it was determined that the original interpretation of Technical Specification fire rated assemblies and seals was incorrect. This was confirmed in discussions with the Nuclear Reactor Regulation (NRR) Branch of the NRC and resulted in a new clarification of the definition which was subsequently incorporated into the ongoing engineering review.

As the engineering review progressed, the following items were identified through surveillance and review as meeting the new interpretation of Technical Specification fire barriers, but were not being surveilled as such:

- a) On April 7, 1987 fire seal penetrations P027-1052 (Reactor Building-522 Elevation) and C405-5019 (Radwaste Building-507 Elevation) were identified as not being sealed as required by the Plant Technical Specifications.
- b) On April 14, 1987 it was discovered that Fire Door C-322 (Radwaste Building-487 Elevation: Post Accident Sampling System Room) had not been included in Technical Specification surveillance procedures.

The independent engineering review is nearing completion, at which time a supplemental report will be submitted.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Washington Nuclear Plant - Unit 2	05000397	87	004	01	03	OF	05

TEXT (If more space is required, use additional NRC Form 305A's) (17)

Supplement to Original Event Description

It was determined from the completed independent engineering review that the following additional fire seal penetrations were not sealed as required by the Plant Technical Specifications:

- o C106-1174 and 1175 (Radwaste Building - 437 Elevation).

It should be noted that the Supply System had expected to submit this LER revision by June 26, 1987. However, at that time, issues still remained which needed to be resolved regarding fire penetration identification and sealing requirements. The resolution of those issues impacted the due date in terms of providing accurate information in the LER. Accordingly, discussions were held with the NRC (Region V) and it was agreed that a new date of July 17, 1987 would be established.

Immediate Corrective Action

- a) Fire penetrations seals P027-1502 and C405-5019 were placed on an hourly fire tour.
- b) Fire Door C-322 was incorporated (by means of a procedure deviation) into Plant Procedures 7.4.7.7.2.1, "Fire Door Operability," and 7.4.7.7.2.3, "Locked Fire Door Operability." The door was verified to be locked and operable.
- c) Maintenance Work Requests (MWRs) were written to:
 - o Grout fire penetration seal P027-1502
 - o Seal fire penetration seal C405-5019
- d) The additional two fire penetration seals were placed on the hourly fire tour and MWRs were written to have them sealed.

Further Evaluation and Corrective Action

- a) Further Evaluation
 - o Fire seal penetration P027-1502 is located in an area containing Appendix R, Division 2, Safe Shutdown components (specifically, Reactor level and pressure control instrumentation). However, as stated in the FSAR, loss of all unprotected equipment in this fire area is not considered a credible event due to the low fire loading and geometrical configuration of the Reactor Building.
 - o Fire seal penetration C405-5019 is located in a corridor floor. Located below this penetration is Fire Area RC-XX (Radwaste Building - Elevation 487). Although this area contains safety-related equipment, there are no components or cabling in the area required for operation of the Appendix R, Division 1, Safe Shutdown System.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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TEXT (If more space is required, use additional NRC Form 368A's) (17)

- o Due to the fact that several years have passed since the original drawing omissions occurred and that Burns and Roe is no longer acting in the capacity of the WNP-2 Architect Engineer, it is not possible (nor constructive) to positively identify the cause of this event. However, all indications at this time point to a lack of complete communication between the two separate groups responsible for the review process. It has been determined that the original Appendix R design basis is correct and has not changed.
 - o Internal Engineering Program controls have already been incorporated into the Plant Modification process to ensure that resealing instructions are in the design package for each modification affecting the integrity of any fire seal. In addition, the Fire Protection Engineer reviews each design modification prior to issuance to determine program impact. These controls complement the seal inspections required by Technical Specifications and the additional efforts presently on-going to verify the integrity of all non-Technical Specification fire seals.
 - o The two additional fire seal penetrations C106-1174 and 1175 are located in Fire Area RC-I. Although this fire area contains safety-related equipment, there are no components or cabling in the area required for operation of the Appendix R, Division 1, Safe Shutdown System.
- b) Further Corrective Action
- o An independent engineering review that applies the new definition of fire-rated assemblies and seals is currently being performed to ensure that all fire doors, barriers and penetrations are properly identified on Plant drawings and in Plant procedures.
 - o At the completion of the review, all associated drawings and documentation will be updated as required. In addition, a supplemental report describing any further deficiencies discovered will be submitted.
 - o The above review has been completed and no further corrective action is planned.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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

Safety Significance

There is no safety significance associated with this event in that 1) the fire door was verified to be locked and operable, and 2) the two penetrations were located in areas which either were considered to be low-risk with respect to fire occurrences, or did not contain components or cabling required for the operation of the 10CFR50, Appendix R, Division 1, Safe Shutdown System. Furthermore, the additional two penetrations discovered as a result of the independent engineering review are located in areas which do not contain components or cabling required for the operation of the Appendix R, Division 1, Safe Shutdown System.

Similar Events

LER 87-004-00

EIIS InformationText ReferenceEIIS Reference

	System	Component
Fire Door C322	ME	Door
Miscellaneous Buildings and Structures	ME	----
Fire Seal Penetrations P027-1502 and C405-5019	KP	Penetration
Fire Protection System	KP	----
Fire Seal Penetrations C106-1174 and 1175	KP	Penetration

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Docket No. 50-397

July 17, 1987

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

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 87-004-01

Dear Sir:

Transmitted herewith is Licensee Event Report No. 87-004-01 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,



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

CMP:db

Enclosure:

Licensee Event Report No. 87-004-01

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. D. L. Williams - BPA (M/D 399)

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