

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9708250397 DOC. DATE: 97/08/15 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
 AUTH. NAME AUTHOR AFFILIATION
 PFITZER, B. Washington Public Power Supply System
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 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 97-008-00: on 970716, wire seal used to lock containment instrument air pressure control valve, CIA-PCV-2B, found not intact. Cause of misadjustment of CIA-PCV-2B unknown. Event will be communicated to plant employees. W/970815 itr.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • Richland, Washington 99352-0968

August 15, 1997
GO2-97-157

Docket No. 50-397

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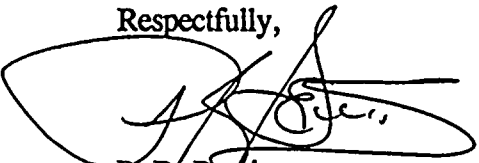
Gentlemen:

Subject: **NUCLEAR PLANT WNP-2, OPERATING LICENSE NPF-21,
LICENSEE EVENT REPORT NO. 97-008-00**

Transmitted herewith is Licensee Event Report No. 97-008-00 for WNP-2. This report is submitted pursuant to 10 CFR 50.73 and discusses the items of reportability, corrective action taken, and action to preclude recurrence.

Should you have any questions or desire additional information regarding this matter, please call me or Mr. Paul Inserra at (509) 377-4147.

Respectfully,


P. R. Benis
Vice President, Nuclear Operations
Mail Drop PE23

Enclosure

cc: EW Merschoff, NRC RIV
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Washington Nuclear Plant - Unit 2	DOCKET NUMBER (2) 50-397	PAGE (3) 1 OF 3
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TITLE (4) INOPERABILITY OF FOUR AUTOMATIC DEPRESSURIZATION SYSTEM VALVES DUE TO CIA-PCV-2B PRESSURE SETPOINT DISCOVERED SET LESS THAN REQUIRED

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
07	16	97	97	008	00	08	15	97	N/A	05000

OPERATING MODE	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER	90%	20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)		
		20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)		
		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER		
		20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)				
		20.405(a)(1)(iv)		X 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 Bill Pfitzer, Licensing Engineer	TELEPHONE NUMBER (Include Area Code) 509-377-2419

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		MONTH		DAY		YEAR	
YES (If yes, completed EXPECTED SUBMISSION DATE)				NO							

ABSTRACT: On July 16, 1997, with the plant operating at 90% power, the wire seal used to lock containment instrument air pressure control valve, CIA-PCV-2B, was found not intact. This valve controls backup nitrogen pressure (actuating medium) to the four subsystem B automatic depressurization system (ADS) valves. Subsequent maintenance troubleshooting activities revealed the setpoint for CIA-PCV-2B was set to approximately 63 psig, well below the intended setpoint of 180 +/-2 psig.

Security and Operations have conducted an investigation into this event. It was determined that this valve was set to its required setpoint during CIA system startup following system maintenance during the last outage. No clear evidence of tampering was found since that time, and the cause of the misadjustment of CIA-PCV-2B is unknown. As a corrective action, the setpoint for CIA-PCV-2B has been readjusted to 180 +/-2 psig and a new locking wire seal was installed.

This condition is reported per 10 CFR 50.73(a)(2)(ii) as a condition prohibited by Technical Specifications. Due to the redundant design features of ADS, both the long term and short term functions of ADS would have been accomplished during the period when CIA-PCV-2B was misadjusted. Therefore, the safety significance of this event is minimal.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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		97	008	00	

Washington Nuclear Plant - Unit 2

50-397

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

Event Description

On July 16, 1997, with the plant operating at 90% power, the wire seal used to lock containment instrument air [LD] pressure control valve [PCV], CIA-PCV-2B, was found not intact. This valve controls backup nitrogen pressure (actuating medium) to the four B subsystem ADS valves. Subsequent maintenance troubleshooting activities revealed the setpoint for CIA-PCV-2B was set to approximately 63 psig, well below the intended setpoint of 180 +/-2 psig. This regulating valve was set to its required setpoint during CIA system startup following system maintenance during the last outage. Reactor startup from the last refueling outage occurred on July 4, 1997.

CIA nitrogen bottles supply the backup actuating medium to the ADS valves via CIA-PCV-2B. Throughout the event, including the maintenance activities to reset CIA-PCV-2B, all seven ADS valves were supplied by the containment nitrogen system (CN)[LK] which supplies the normal actuating medium to the ADS valves.

Immediate Corrective Action

On July 18, 1997, the CIA supply to ADS subsystem B was isolated in preparation for verifying the setpoint of CIA-PCV-2B, and accordingly entry was made into Technical Specification Action Statement (TSAS) 3.5.1.G. The setpoint for CIA-PCV-2B was found to be 63 psig and was readjusted to 180 +/-2 psig and a new locking wire seal was installed. After restoration of the CIA supply, TSAS 3.5.1.G was exited.

Further Evaluation

The normal ADS valve actuating medium is supplied by the CN system. If CN pressure to the ADS valves falls to less than 160 psig, the CN supply is automatically isolated, and CIA-PCV-2A and -2B function to regulate backup nitrogen to ADS subsystems A and B from pressurized bottles in the CIA system. Of these two supplies, the CIA bottles (the backup supply) is a safety related system, and the CN system (the normal supply) is not safety related. Thus, the CIA supply must be operable to support ADS operability. Therefore, this event rendered the four ADS valves in the B subsystem inoperable.

Immediately after discovery of the broken wire seal it was not recognized that the valve setpoint may have been changed, or that ADS operability had been affected. The setpoint of CIA-PCV-2B was not verified until approximately two days after discovery of the broken wire seal when necessary work documents were developed and approved. For purpose of this report, it is assumed that CIA-PCV-2B was misadjusted from the time of discovery of the broken wire seal to the time the valve was readjusted to the required value of 180 psig, a period of approximately 52 hours. TSAS 3.5.1.G requires the plant to be placed in Mode 3 within 12 hours when two or more ADS valves are inoperable. Therefore, this condition is reported per 10 CFR 50.73(a)(2)(ii) as a condition prohibited by Technical Specifications.

LICENSEE EVENT REPORT (LER)
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Root Cause

Security and Operations have conducted an investigation into this event. It was revealed that this regulating valve was set to its required setpoint during CIA system startup during the last outage. No clear evidence of tampering since that time was found, and the cause of the misadjustment of CIA-PCV-2B is unknown.

Further Corrective Action

Information concerning this event will be communicated to plant employees.

Guidance will be added to plant procedure(s) to specify that if there is reason to suspect a plant component is improperly configured, prompt corrective action will be taken to verify the proper configuration.

Assessment of Safety Consequences

The short term function of the ADS system is to provide post-LOCA vessel depressurization capability to permit use of the low pressure emergency core cooling system (ECCS) spray/injection subsystems for vessel injection. This function was unaffected by CIA-PCV-2B being misadjusted because all seven ADS valves were supplied throughout the event by the normal nitrogen supply provided by the CN system, and each ADS valve is provided with a pressure accumulator which, if the nitrogen supply were to fail, would support the short term function of ADS by providing pressure for approximately five valve operations.

The long term function of the ADS system is to supply a flow path for alternate shutdown cooling. This would also be supported by the normal CN supply to the ADS valves. But, if the CN supply were to fail, nitrogen leakage from the ADS valve actuators and associated piping may be such that pressure in the accumulators would be insufficient to hold the ADS valves open for the long periods necessary to support the alternate shutdown cooling flow path. In the case of this event, the result of a CN failure would be that the four B system ADS valves would be unavailable for the long term function of alternate shutdown cooling, and only the three A subsystem ADS valves would be available to provide an alternate shutdown cooling flow path. However, analysis shows that only two ADS valves are required to provide a flow path for alternate shutdown cooling. Therefore, the long term function of ADS could be accomplished with the three valves in the A subsystem of ADS.

Per this analysis, both the long term and short term functions of ADS would have been accomplished during the period when CIA-PCV-2B was set to 63 psig. Therefore, the safety significance of this event is minimal.

Similar Events

None

