

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9007120150 DOC.DATE: 90/06/07 NOTARIZED: NO DOCKET #
 FACIL:50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
 AUTH.NAME AUTHOR AFFILIATION
 FIES,C.L. Washington Public Power Supply System
 POWERS,C.M. Washington Public Power Supply System
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-013-00:on 900610,ESF isolations & actuations due to
 breaker trip,cause unknown.

W/9 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 5
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD5 LA	1 1	PD5 PD	1 1
	SAMWORTH,R	1 1		
INTERNAL:	ACNW	2 2	ACRS	2 2
	AEOD/DOA	1 1	AEOD/DSP/TPAB	1 1
	AEOD/ROAB/DSP	2 2	NRR/DET/ECMB 9H	1 1
	NRR/DET/EMEB9H3	1 1	NRR/DLPQ/LHFB11	1 1
	NRR/DLPQ/LPEB10	1 1	NRR/DOEA/OEAB11	1 1
	NRR/DREP/PRPB11	2 2	NRR/DST/SELB 8D	1 1
	NRR/DST/SICB 7E	1 1	NRR/DST/SPLB8D1	1 1
	NRR/DST/SRXB 8E	1 1	REG FILE 02	1 1
	RES/DSIR/EIB	1 1	RGN5 FILE 01	1 1
EXTERNAL:	EG&G BRYCE,J.H	3 3	L ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
	NSIC MAYS,G	1 1	NSIC MURPHY,G.A	1 1
	NUDOCS FULL TXT	1 1		

Cert No p085692281

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 34 ENCL 34

A/0-4



1
2

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

Docket No. 50-397

July 6, 1990

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

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 90-013

Dear Sir:

Transmitted herewith is Licensee Event Report No. 90-013 for the WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the items of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,

C. M. Powers

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

CMP:lr

Enclosure:
Licensee Event Report No. 90-013

cc: Mr. John B. Martin, NRC - Region V
Mr. C. J. Bosted, NRC Site (M/D 901A)
INPO Records Center - Atlanta, GA
Ms. Dottie Sherman, ANI
Mr. D. L. Williams, BPA (M/D 399)

9007120150 900607
PDR ADOCK 05000397
S PDC

*Cent No
2085602241
IF2Z
11*

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Washington Nuclear Plant - Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 9 7										PAGE (3) 1 OF 0 4		
TITLE (4) Engineered Safety Feature (ESF) Isolations and Actuations Due to Breaker Trip - Cause Unknown																						
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	6	10	9	0	9	0	0	13	0	0	0	7	0	6	9	0						
OPERATING MODE (9) 4			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																			
POWER LEVEL (10) 0 0 0			20.402(b)				20.405(c)				X 50.73(a)(2)(iv)				73.71(b)							
			20.406(a)(1)(i)				50.38(c)(1)				50.73(a)(2)(v)				73.71(c)							
			20.406(a)(1)(ii)				50.38(c)(2)				50.73(a)(2)(vii)				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)											
			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 C. L. Fies, Compliance Engineer												TELEPHONE NUMBER 5 0 9 3 7 7 - 2 0 3 9										
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												
X	E D	B K R	W 1 2 0	Y																		
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)

On June 10, 1990 at 1309 hours the breaker (E-CB-73/7A) between the Low Voltage Critical Switchgear (E-SL-73) and Motor Control Center 7A (E-MC-7A) tripped causing a loss of power to several loads including Reactor Protection System (RPS) Bus A. Loss of power to RPS Bus A caused a half-scam in RPS Division A and multiple primary containment isolations which are Engineered Safety Feature (ESF) actuations. At the time of the event the plant was in outage status in the cold shutdown mode.

The loss of RPS A power causes Nuclear Steam Supply Shutoff System (NSSSS) Containment Outboard Isolations for isolation Groups (1,2,5,6 and 7). Plant Operators responded by restoring all systems, including Residual Heat Removal (RHR-Loop "A") Shutdown Cooling, to pre-event lineup status by 1400 hours.

The cause of this event is indeterminent.

There is no safety significance associated with this event. No actual plant conditions requiring the Engineered Safety Feature isolations and actuations existed, and all isolations and actuations occurred as designed.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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

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

Plant Conditions

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

Event Description

On June 10, 1990 at 1309 hours the breaker (E-CB-73/7A) between the Low Voltage Critical Switchgear (E-SL-73) and Motor Control Center 7A (E-MC-7A) tripped causing a loss of power to several loads including Reactor Protection System (RPS) Bus A. Loss of power to RPS Bus A caused a half-scam in RPS Division A and multiple primary containment isolations which are Engineered Safety Feature (ESF) actuations. At the time of the event the plant was in outage status in the cold shutdown mode.

The loss of RPS Bus A power causes Nuclear Steam Supply Shutoff System (NSSSS) Containment Outboard Isolations for Groups 1 (Main Steam Line Drain Valves only), Group 2 (Reactor Water Sample Valves), Group 5 (Residual Heat Removal [RHR] and Traversing In-Core Probe (TIP) Systems), Group 6 (RHR Shutdown Cooling), and Group 7 (Reactor Water Cleanup [RWCU] System). Since the plant was in an outage status at the time of the event, some isolation functions were not carried to completion because some systems were out of service. For example, the Main Steam Line outboard drain valves (MS-V-19 and MS-V-67) were in a closed position at the time of the event due to work on the Main Steam Isolation Valves (MSIVs). At the time of the event, Residual Heat Removal (RHR-Loop "A") was providing Shutdown Cooling. This cooling capability was lost for approximately 40 minutes due to the closure of Primary Containment isolation valves in RHR-Loop "A" (RHR-V-8 isolates the suction to both RHR Shutdown Cooling Loops and RHR-V-53A is the return line valve in Loop "A"). During the isolation the primary coolant water temperature increased less than 13 degrees F remaining below 138 degrees F. The Technical Specification limit is 200 degrees F. The Reactor Water Cleanup System (RWCU) was also isolated by the closure of the outboard isolation valve (RWCU-V-4).

Immediate Corrective Action

Immediate corrective actions were taken to restore power to E-MC- 7A. Actions were also taken to restore shutdown cooling (using RHR-Loop "A") and other isolations that occurred during the event. These actions were completed at 1352 hours.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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

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

Further Evaluation and Corrective ActionA. Further Evaluation

1. This event is reportable under 10CFR50.73(a)(2)(iv) as "an event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS)".
2. There were no systems, structures or components out-of-service prior to the event that affected the event.
3. The cause of the event is indeterminent. The breaker was inspected and a complete set of mechanical and electrical tests were performed in an attempt to determine the cause of the trip. These tests included a checkout of the alarm circuitry which would have annunciated in the control room if the breaker had tripped due to overcurrent. Plant Maintenance personnel were working in the general area when the trip occurred. Discussions with these workers indicated they did nothing that would cause the breaker to trip.

B. Further Corrective Action

1. The breaker was replaced by a spare unit.
2. No further corrective actions are planned for this event.

Safety Significance

There is no safety significance associated with this event because no Plant condition requiring the ESF actuations existed, and all ESF acutations occurred as designed.

There was also no safety significance associated with the loss of RHR Shutdown Cooling. Shutdown cooling was restored in less than one hour; the Technical Specification action statement limit. The reactor vessel water temperature increased less than 13 degrees F remaining below 138 degrees F. This is well below the Mode 4 operational temperature limit of 200 degrees F. As a result, the loss of RHR Shutdown Cooling due to the isolation of the RHR Shutdown Cooling Containment Isolation Valves did not create a safety hazard. In addition, alternate shutdown cooling methods were available and an alternate power supply was available to provide power to RPS Bus A. Accordingly, this event posed no threat to the health and safety of either the public or plant personnel.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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

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

Similar Events

There are no similar events that are directly related to this event. There have been ESF actuations caused by the trip of Electrical Protection Assembly (EPA) breakers associated with the Reactor Protection System (RPS) buses. These events have similar consequences but different causes.

EIIS Information

Text Reference	EIIS Reference	
	System	Component
Electrical Breaker (E-CB-73/7A)	ED	BKR
Electrical Switchgear (E-SL-73)	ED	SWGR
Motor Control Center (E-MC-7A)	ED	MCC
Reactor Protection System (RPS)	JC	---
RPS Bus A	JC	BU
Nuclear Steam Supply Shutoff System (NSSSS)	BO	---
Residual Heat Removal (RHR)	BO	---
Main Steam Line (MS) Drain Valves (MS-V-19) and (MS-V-67)	SN	LOV
Reactor Water Sample Valves	AD	SMV
Traversing Incore Probe (TIP) System	IG	---
Reactor Water Cleanup (RWCU) System	CE	---
Valve RHR-V-8	BD	ISO
RHR Valve 53A (RHR-V-53A)	BO	V
RWCU Valve 4 (RWCU-V-4)	CE	V
Electrical Protection Assembly (EPA) Breakers	JC	BKR