

# FORD 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9210160019      DOC. DATE: 92/10/07      NOTARIZED: NO      DOCKET #  
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe      05000397  
 AUTH. NAME      AUTHOR AFFILIATION  
 BAKER, J.W.      Washington Public Power Supply System  
 RECIP. NAME      RECIPIENT AFFILIATION  
 MARTIN, J.B.      Region 5 (Post 820201)

SUBJECT: Special rept: on 920905, channel 1 on main steam line D  
 nozzle in drywell did not pass surveillance & inoperable for  
 more than 30 days. Caused by faulty equipment in drywell.  
 Maint work request initiated to repair failed channel.

DISTRIBUTION CODE: IE01D      COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 2  
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

### NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD5 PD	1 1	DEAN, W.	1 1
INTERNAL:	ACRS	2 2	AEOD	1 1
	AEOD/DEIB	2 2	AEOD/DSP/TPAB	1 1
	AEOD/TTC	1 1	DEDRO	1 1
	NRR MORISSEAU, D	1 1	NRR/DLPQ/LHFBPT	1 1
	NRR/DLPQ/LPEB10	1 1	NRR/DOEA/OEAB	1 1
	NRR/DREP/PEPB9H	1 1	NRR/PMAS/ILRB12	1 1
	NUDOCS-ABSTRACT	1 1	<del>OE-DIR</del>	1 1
	OGC/HDS1	1 1	<u>REG FILE</u> 02	1 1
	RGN5      FILE      01	1 1		
EXTERNAL:	EG&G/BRYCE, J.H.	1 1	NRC PDR	1 1
	NSIC	1 1		

Second distribution due to new  
Rids Code

### NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK.  
 ROOM P1-37 (EXT. 504-2065) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR      24      ENCL

0  
24

IA2

R  
I  
D  
S  
/  
F  
  
O  
R  
D  
  
1  
  
D  
  
O  
C  
U  
M  
E  
N  
T



RECEIVED  
WASHINGTON PUBLIC POWER SUPPLY SYSTEM NRC  
REGION V

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352-0968 • (509) 372-5000

1992 OCT 14 AM 10:07

October 7, 1992  
602-92-234

Docket No. 50-397

Mr. J. B. Martin  
Regional Administrator  
US NRC, Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, Ca. 94596

Dear Mr. Martin:

Subject: WNP-2, OPERATING LICENSE NPF-21 SPECIAL REPORT:  
LOOSE-PART DETECTION INSTRUMENTATION TECHNICAL  
SPECIFICATION 3.3.7.10

This request report is submitted pursuant to the requirements of WNP-2 Technical Specification 3.3.7.10 "Loose-Part Detection Instrumentation" which requires the instruments to be operable at all times. The action statement for this specification requires that "with one or more loose-part detection system channels inoperable for more than 30 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status."

The loose-part detection system has been designed and installed to detect the presence of internal loose parts in the reactor vessel. The loose parts monitoring system is a system dedicated to monitoring the reactor vessel via the use of 10 permanently mounted sensors in various locations around the reactor vessel. A signal of twice the general background noise from any one sensor will generate an alarm. The alarm would alert the Shift Technical Advisor to listen to the signals with head phones and try to determine the cause of the alarm. The signals causing the alarm are automatically recorded and are available for vendor analysis, if necessary.

During performance of the daily channel check, on September 5, 1992, with the plant in Mode 1 (RUN), it was noted that channel #1 did not pass the surveillance. On the next working day, the system engineer determined there was a system problem and initiated an MWR. Maintenance ordered a part to be used for troubleshooting on September 10, 1992. On September 15, 1992, it was determined that the problem with channel #1 was with the equipment in the drywell. All of the equipment in the drywell for this channel was replaced at the end of the R7 1992 refueling outage, therefore the exact cause of the failure is not known.

300055

*92-10-16-00-19*  
*2p*

*IE-0*

Page Two  
LOOSE-PART DETECTION INSTRUMENTATION

Channel #1 is located on the Main Steam Line D nozzle in the drywell. Analysis of the signal relationship from the 10 channels is used to determine the location of the suspected loose part. There are two sensors located on steam lines to monitor the top of the vessel. Therefore determining the location of suspected loose parts at the top of the vessel will be impacted with the loss of channel #1. The alarm logic is determined by the relationship of the background noise level (long time constant RMS average) of a channel vs the signal noise level (short time constant RMS average) of the same channel and is independent of the number of channels in service. The system output is an annunciator on Board S in the control room and a magnetic tape recording of all ten signals at the time of the alarm. There are no automatic actuations produced by this instrument.

While the Technical Specification requires the system to be declared inoperable, the loose parts monitor system design allows the system to be partially operational when less than the full ten channels are operational. The failed equipment is located in the drywell and is not accessible during reactor operation. An MWR has been initiated to repair the failed channel the next time the drywell is accessible. WNP-2 will continue to monitor the functionality of the remaining channels.

Very truly yours,

*J.W. Baker for*

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

DLO/bk

cc: NRC Document Control Desk  
Mr. J. W. Clifford - NRC  
Mr. W. Ang, NRC Resident Inspector - (M/D 901A)  
Mr. D. L. Williams, BPA (M/D 399)  
NRC Resident Inspector Walkover Copy



# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9210160019 DOC. DATE: 92/10/07 NOTARIZED: NO DOCKET #  
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397  
 AUTH. NAME AUTHOR AFFILIATION  
 BAKER, J.W. Washington Public Power Supply System  
 RECIP. NAME RECIPIENT AFFILIATION  
 MARTIN, J.B. Region 5 (Post 820201)

SUBJECT: Special rept: on 920905, channel 1 on main steam line D.  
 nozzle in drywell did not pass surveillance & inoperable for  
 more than 30 days. Caused by faulty equipment in drywell.  
 Maint work request initiated to repair failed channel.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 2  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

### NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES		
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME		LTTR	ENCL	
	PD5 LA		1	1		PD5 PD		1	1	
	DEAN, W.		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/EMEB 7E		1	1	
	NRR/DLPQ/LHFB10		1	1		NRR/DLPQ/LPEB10		1	1	
	NRR/DOEA/OEAB		1	1		NRR/DREP/PRPB11		2	2	
	NRR/DST/SELB 8D		1	1		NRR/DST/SICB8H3		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		2	2		L ST LOBBY WARD		1	1	
	NRC PDR		1	1		NSIC MURPHY, G.A		1	1	
	NSIC POORE, W.		1	1		NUDOCS FULL TXT		1	1	

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK.  
 ROOM P1-37 (EXT. 504-2065) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 31 ENCL 31

IA2

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352-0968 • (509) 372-5000

October 7, 1992  
G02-92-234

Docket No. 50-397

Mr. J. B. Martin  
Regional Administrator  
US NRC, Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, Ca. 94596

Dear Mr. Martin:

Subject: WNP-2, OPERATING LICENSE NPF-21 SPECIAL REPORT:  
LOOSE-PART DETECTION INSTRUMENTATION TECHNICAL  
SPECIFICATION 3.3.7.10

This request report is submitted pursuant to the requirements of WNP-2 Technical Specification 3.3.7.10 "Loose-Part Detection Instrumentation" which requires the instruments to be operable at all times. The action statement for this specification requires that "with one or more loose-part detection system channels inoperable for more than 30 days, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status."

The loose-part detection system has been designed and installed to detect the presence of internal loose parts in the reactor vessel. The loose parts monitoring system is a system dedicated to monitoring the reactor vessel via the use of 10 permanently mounted sensors in various locations around the reactor vessel. A signal of twice the general background noise from any one sensor will generate an alarm. The alarm would alert the Shift Technical Advisor to listen to the signals with head phones and try to determine the cause of the alarm. The signals causing the alarm are automatically recorded and are available for vendor analysis, if necessary.

During performance of the daily channel check, on September 5, 1992, with the plant in Mode 1 (RUN), it was noted that channel #1 did not pass the surveillance. On the next working day, the system engineer determined there was a system problem and initiated an MWR. Maintenance ordered a part to be used for troubleshooting on September 10, 1992. On September 15, 1992, it was determined that the problem with channel #1 was with the equipment in the drywell. All of the equipment in the drywell for this channel was replaced at the end of the R7 1992 refueling outage, therefore the exact cause of the failure is not known.

140074

9210160019 921007  
PDR ADDCK 05000397  
S PDR

JE22 1/0





Page Two  
LOOSE-PART DETECTION INSTRUMENTATION

Channel #1 is located on the Main Steam Line D nozzle in the drywell. Analysis of the signal relationship from the 10 channels is used to determine the location of the suspected loose part. There are two sensors located on steam lines to monitor the top of the vessel. Therefore determining the location of suspected loose parts at the top of the vessel will be impacted with the loss of channel #1. The alarm logic is determined by the relationship of the background noise level (long time constant RMS average) of a channel vs the signal noise level (short time constant RMS average) of the same channel and is independent of the number of channels in service. The system output is an annunciator on Board S in the control room and a magnetic tape recording of all ten signals at the time of the alarm. There are no automatic actuations produced by this instrument.

While the Technical Specification requires the system to be declared inoperable, the loose parts monitor system design allows the system to be partially operational when less than the full ten channels are operational. The failed equipment is located in the drywell and is not accessible during reactor operation. An MWR has been initiated to repair the failed channel the next time the drywell is accessible. WNP-2 will continue to monitor the functionality of the remaining channels.

Very truly yours,

*J.W. Baker for*

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

DLO/bk

cc: NRC Document Control Desk  
Mr. J. W. Clifford - NRC  
Mr. W. Ang, NRC Resident Inspector - (M/D 901A)  
Mr. D. L. Williams, BPA (M/D 399)  
NRC Resident Inspector Walkover Copy

