

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8607220404 DDC. DATE: 86/07/16 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Power 05000397
 AUTH. NAME AUTHOR AFFILIATION
 SORESEN, G. C. Washington Public Power Supply System
 RECIP. NAME RECIPIENT AFFILIATION
 ADENSAM, E. G. BWR Project Directorate 3

SUBJECT: Responds to 860314 SER implying that App R analysis requirements performed for high-pressure-to-low-pressure sys interfaces must assume that two spurious actuations occur simultaneously. Position contrary to generic ltrs.

DISTRIBUTION CODE: A006D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: OR Submittal: Fire Protection

NOTES:

	RECIPIENT ID CODE/NAME		COPIES		RECIPIENT ID CODE/NAME		COPIES	
			LTTR	ENCL			LTTR	ENCL
	BWR PD3 LA		1	0	BWR PD3 PD	01	3	3
	BRADFUTE, J		1	1				
INTERNAL:	ACRS	11	3	3	ADM/LFMB		1	0
	ELD/HDS2		1	0	IE WHITNEY, L		1	1
	NRR BWR DIR		1	1	NRR PWR-A DIR		1	1
	NRR PWR-B DIR		1	1	NRR STANG, J	07	2	2
	NRR WERMEIL, JO6		1	0	REG FILE	04	1	1
	RGNS		1	1				
EXTERNAL:	LPDR	03	1	1	NRC PDR	02	1	1
	NSIC	05	1	1				

TOTAL NUMBER OF COPIES REQUIRED: LTTR 22 ENCL 18

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

1944-1945

Washington Public Power Supply System

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

8607220404 860716
PDR ADDCK 05000397
F PDR

July 16, 1986
G02-86-656

Docket No. 50-397

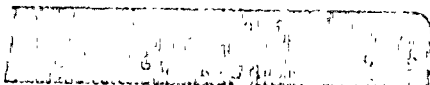
Director of Nuclear Reactor Regulation
Attn: E. G. Adensam, Project Director
BWR Project Directorate No. 3
Division of BWR Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Ms. Adensam:

Subject: NUCLEAR PLANT NO. 2
OPERATING LICENSE NPF-21, FINAL RESOLUTION
OF HI/LOW PRESSURE INTERFACE CONCERN

- References:
- 1) Letter, D. F. Kirsch (NRC-Reg. V) to G. C. Sorensen (SS), "Nonconformance of Safe Shutdown Equipment to Appendix R Requirements", dated June 7, 1985
 - 2) Letter, G02-85-318, G. C. Sorensen (SS) to D. F. Kirsch (NRC-Reg. V), Same Subject as Above, dated June 17, 1985
 - 3) Letter, D. F. Kirsch (NRC-Reg. V) to G. C. Sorensen (SS), Safety Evaluation Report (Same Subject), dated March 14, 1986
 - 4) Letter, E. G. Adensam (NRC) to G. C. Sorensen (SS), "WNP-2 Fire Protection Program - Request for Additional Information", dated May 23, 1986
 - 5) Letter, G02-86-613, G. C. Sorensen (SS) to E. G. Adensam (NRC), Same Subject as Above, dated June 30, 1986

The purpose of this letter is to provide the Supply System's response to the NRC Staff position as described in the Safety Evaluation Report (SER) transmitted in Reference 3. The SER implies that the Appendix R analysis requirements performed for high-pressure-to-low-pressure system interfaces must assume that two spurious actuations occur simultaneously, causing both series isolation valves to open. This position is contrary to the positions stated in Generic Letters 85-01 and 86-10, paragraphs 5.3.10a and b, and Question No. 5 of Reference 4. In these latter references, the Staff position is that only one spurious signal must be assumed at a time.



A006
1/1

July 16, 1986

FINAL RESOLUTION OF HI/LOW PRESSURE INTERFACE CONCERN

The impact of this dual failure was for the Supply System to remove power from certain RHR valve sets and to maintain the RHR Remote Transfer switch in the isolate position. This was not the Supply System's understanding of the Staff's position following our initial discussions prior to the issuance of the SER. It was the Supply System's understanding that only power removal or placing the remote transfer switch in the remote position was necessary.

Even though the SER addresses only valves RHR-V-123A and RHR-V-53A, as discussed with Mr. J. Ridgely, the scenario also requires similar action be applied to one of the valves in pairs RHR-V-8 and RHR-V-9, and RHR-V-123B and RHR-V-53B.

As shown in the attached figure, the redundant divisional steel control panels housing the interlock logic for the valve pairs (panels P622 and P623) are physically separated by 42 feet (panel P629 is involved for RHR-V-53A and B is more than 42 feet from P622). To cause valve pairs to open simultaneously, the fire must penetrate both the separated redundant steel cabinets and cause a specific two wires located in each of the panels to cross connect, all before the Control Room Operators can take control from the Remote Shutdown Room.

There are a number of problems with removing power from these valves and/or leaving the transfer switches in the "Remote" position as directed by the SER:

- 1) RHR valves V8 and V9 form the suction/discharge path to/from the RHR pumps from the vessel for the shutdown cooling mode of operation. The MCC's for these valves are considered inaccessible post LOCA as they are located in the Reactor Building. Power removal would result in the loss of the primary emergency post-LOCA shutdown path. Removal of this long term core cooling path is not considered prudent. Additionally, a major revision to the plant Emergency Procedures, Operator Training, etc. would be required.
- 2) Removing power from any of these valves would cause the Reg. Guide 1.47 indication system to activate. Again this would require a design change to correct and result in the loss of ability to comply with Reg. Guide 1.47 for these valves.
- 3) Leaving the transfer switch in the "Remote" position also requires a significant redesign of the Remote Shutdown System and panels, i.e., new transfer switches would be required for these valves since, at present, several valves are controlled from a single switch.

E. G. Adensam

Page Three

July 16, 1986

FINAL RESOLUTION OF HI/LOW PRESSURE INTERFACE CONCERN

- 4) Leaving the switch in the "Remote" position bypasses all the protective interlocks (such as the low pressure interlock) which is not prudent during normal plant operation.

Considering the above, the Supply System feels that the design should remain as is. However, as discussed with Mr. J. Ridgely on June 17, 1986, the applicable plant annunciator response procedures will be modified such that in the event of a fire in any of the three panels (fire detectors are located in each), the plant Operators will actuate the appropriate Remote Shutdown Transfer Switches for the redundant valve control to assure that at least one of the series valves will not inadvertently open.

Should you have any questions regarding this matter, please contact Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,



G. C. Sorensen, Manager
Regulatory Programs

HLA/GWB/tmh
Attachment

cc: JO Bradfute - NRC
JB Martin - NRC RV
E Revell - BPA
NS Reynolds - BLCP&R
NRC Site Inspector

