



Burns and Roe, Inc.

Nuclear Project No. 2 - Washington Public Power Supply System ■ P.O. Box 200 ■ Richland, Washington 99352 ■ 509-377-2501 ■ 509-943-8200

Subject: W.O. 3900/4000
Washington Public Power Supply System
WNP-2
Potential Deficiency No. 84-04
Responds To: N/A

May 3, 1984
BRGO-RO-84-1
Response Required: N/A

Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Director

Dear Sir:

This letter is to report to you a condition that we have determined to be reportable under 10CFR21. The condition relates to a failure to protect certain cables that are part of 10CFR50 Appendix R "Dedicated Shutdown Systems" and was discussed with Mr. R. Dodds of your Region V Office on May 3, 1984. Complete details are provided in the attached report.

If you have any questions please contact Mr. W.G. Conn at Area Code 509 - 377-2522, extension 4704.

Very truly yours,

W. G. Conn
Licensing Supervisor

WGC:sf

Attachment

cc: Bonneville Power	-	Mr. W.S. Chin
Supply System	-	Mr. A.N. Kugler, w/a
Supply System	-	Mr. L.T. Harrold, w/a
Supply System	-	Mr. J.G. Tellefson, w/a
Nuclear Reg. Com.	-	Mr. J.B. Martin, w/a
Supply System	-	Mr. G.K. Afflerbach, w/a
Supply System	-	Mr. D.H. Walker, w/a
Supply System	-	Mr. J.D. Martin, w/a

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WNP-2 POTENTIAL DEFICIENCY
10CFR 50.55(e)/Part 21
PROTECTION OF DEDICATED EQUIPMENT
APPENDIX "R" NO. 84-04

DESCRIPTION

Nine control cables providing control and one instrument cable providing indication of 10CFR50 Appendix R "Dedicated Shutdown Systems" have been found to be unprotected from the effects of fire.

DATE AND METHOD OF DISCOVERY

The above condition was identified on April 11, 1984 as a result of a complete reevaluation and final update of fire hazards analyses required by 10CFR50 Appendix R (B&R task 6030).

SAFETY IMPLICATION

Failure of nine of the ten identified cables due to the effects of fire could jeopardize the proper functioning of the "Dedicated Shutdown Systems" during a postulated fire event resulting in inadequate reactor cooling. The specific cables and their function are attached to this report.

CAUSE OF DEFICIENCY

Nine of the ten cables are cables added to the design after the baseline Appendix R evaluations had been completed and cable protection requirements issued. The design changes (PEDs) that added these cables were not evaluated from an Appendix R "Dedicated Shutdown System" standpoint. The reason being that no requirement was established for either an in process review or a final "As-Built" evaluation after completion of construction. Appendix R to 10CFR50 was issued late during the construction phase of WNP-2. Consequently, there were several iterations as to what systems should be considered as "dedicated". The final decision as to "dedicated shutdown systems" was made in December 1982, however, it was not formalized until October 1983. Thus, it was not practical to set up an "in process" evaluation requirement for other design work. Consequently, when the PEDs were issued in the February to August 1983 time period, no review was performed.

Personnel assigned in lead roles for this activity in both the Supply System and Burns and Roe were aware that a "final as-built" update was required. There is evidence of this in the form of memos and hand written notes, however, it was not carried forward into a budgeted and scheduled task. This oversight probably occurred because personnel both in the Supply System and Burns and Roe resigned their positions in the mid 1983 time frame. Thus, there was a loss of continuity of personnel at the time when an updating program should have been initiated.

The remaining unprotected cable provides indication of RHR flow to the control room operator. Loss of this indication during a postulated fire event would not in itself result in inadequate reactor cooling. Failure to protect this cable was an oversight but is not considered to be safety significant, in that the RHR system will continue to operate per design.

In summary of the above, there are several contributing factors to this deficiency, including:

- i) Decisions relative to implementation being in a frequent state of change until late in the evaluation.
- ii) Resignations of several key lead personnel late in the evaluation when "loose ends" must be dealt with.
- iii) Failure to properly document the Appendix R work in a timely manner such that effective transfer of responsibility could take place upon loss of key personnel.

ACTION TO PREVENT RECCURANCE

The Supply System is now the design control authority. Burns and Roe will provide a recommendation that the Supply System design control procedures be revised to require fire protection evaluations of future design changes.

CORRECTIVE ACTION

PEDs S218-E-D071 and S215-E-7343 have been issued to reroute/provide protection for all ten deficient circuits.

<u>CABLE NUMBER</u>	<u>FUNCTION</u>	<u>EQUIPMENT AFFECTED</u>	<u>FAILURE MODE</u>
2M8A-48	Control of SW-V-2B	SW-V-2B	Normally closed. Valve for SW-P-1B discharge may not open.
2M8AA-164} 2M8AA-165}	Control of SW-V-4B	SW-V-4B	Normally closed diesel 'B' return valve may not open.
2SM28-12} 2SM28-13}	Control of Standby AC Power	BRKR DG2-8	Loss of control of BRKR-DG2-8
2M8BB-114	Control of RRA-FN-14	RRA-FN-14	Loss of control of RRA-FN-14
BIR22-9064	Control of SW-PCV-38B	SW-PCV-38B	Normally closed. Loop press control valve may not open.
2M8BA-318} 2M8BA-319}	Control of RHR-FCV-64B	RHR-FCV-64B	Normally open. Minimum flow valve may close.
2RHR-35	Indication from flow XMTR E12-FI-NO15B	E12-FI-NO15B	RHR flow indication not available in control room.