

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8104010364 DOC. DATE: 81/03/20 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
 AUTH. NAME AUTHOR AFFILIATION
 MATLOCK, R.G. Washington Public Power Supply System
 RECIP. NAME RECIPIENT AFFILIATION
 ENGELKEN, R.H. Region 5, San Francisco, Office of the Director

SUBJECT: Final deficiency rept re wiring interfaces for Borg-Warner Corp safety-related valve motor operators. Mismatch discovered between connection/wiring diagrams & vendor wiring diagrams. Determined not reportable per 10CFR50.55e.

DISTRIBUTION CODE: B019S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3
 TITLE: Construction Deficiency Report (10CFR50.55E)

NOTES: PM: 2 copies of all material.

05000397

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
ACTION:	A/D LICENSNG 04	1 1	YOUNGBLOOD, B 05	1 1
	RUSHBROOK, M. 06	1 1	LYNCH, D. 07	1 1
INTERNAL:	ASLBP/J. HARD	1 1	D/DIR HUM FAC15	1 1
	EDO & STAFF 19	1 1	EQUIP QUAL BR11	1 1
	HYD/GEO BR 22	1 1	I&E 09	1 1
	LIC QUAL BR 12	1 1	MPA 20	1 1
	NRC PDR 02	1 1	OELD 21	1 1
	PROC TEST REV 13	1 1	QA BR 14	1 1
	REG FILE 01	1 1	RUTHERFORD, W. IE	1 1
	STANDARDS DEV 21	1 1		
EXTERNAL:	ACRS 16	16 16	LPDR 03	1 1
	NSIC 08	1 1		

APR 3 1981

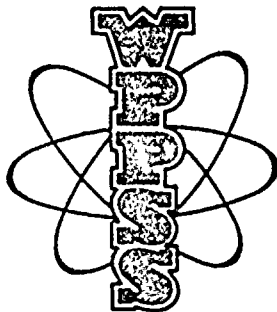
TOTAL NUMBER OF COPIES REQUIRED: LTTR

39
37

ENCL

39
37

MF
JF



Washington Public Power Supply System
A JOINT OPERATING AGENCY

P.O. BOX 968

3000 GEO. WASHINGTON WAY

RICHLAND, WASHINGTON 99352

PHONE (509) 372-5000

March 20, 1981
G02-81-61

Docket No. 50-397

Nuclear Regulatory Commission
Region V
Suite 202, Walnut Creek Plaza
1990 North California Blvd.
Walnut Creek, CA 94596

Attention: Mr. R. H. Engelken, Director

Gentlemen:

Subject: WPPSS NUCLEAR PROJECT NO. 2
POTENTIALLY REPORTABLE DEFICIENCY - 10CFR50.55(e)
WIRING INTERFACES ON MOTOR OPERATORS

Reference: G02-81-04, dated January 7, 1981

Attached is our Final Report on the subject which was first documented in the above-referenced letter.

If you require further information on the subject, please contact us.

Very truly yours,

R. G. MATLOCK
Program Director, WNP-2

RGM:BHS:cd

Attachment: Final Report

cc: WS Chin - BPA
ND Lewis - EFSEC, Olympia
RE Snaith - B&R NY
V. Stello - NRC
AD Toth - NRC Resident Inspector
JJ Verderber - B&R NY
B. Wood - NUS Corporation
WNP-2 Files

US NRC
REGULATORY SERVICES
DIVISION

1981 MAR 31 AM 11 38

REGISTRATION
SERVICES UNIT

8104010 364

B019
5
1/1

5

Final Report

POTENTIALLY REPORTABLE DEFICIENCY WPPSS NUCLEAR PROJECT NO. 2 WIRING INTERFACE FOR SAFETY-RELATED VALVE MOTOR OPERATORS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
DOCKET NO. 50-397
LICENSE NO. CPPR-93

Nature of Deficiency

A review of a vendor drawing submittal in regards to motor-operated valves from the Borg-Warner Corporation was conducted in October of 1980. During this review, Burns and Roe Engineering (AE for WNP-2) discovered a mismatch between the connection/wiring diagrams for RCIC-V-69, RCIC-V-110, RCIC-V-113, and vendor wiring diagrams. Furthermore, the accompanying motor data for RCIC-V-69 indicated a voltage rating of 125 VDC, whereas the contract specification indicated a voltage of 250 VDC which is a design requirement.

Burns and Roe Drawing E-540, Sheet 1, Revision 9 and Sheet 2, Revision 1 indicates cable connections direct to the limit switch terminals and limit switch interconnections to be done by the electrical construction contractor. The vendor wiring diagram shows prewired connections of the limit switches to a terminal block and between selected limit switches.

The above-mentioned valves were shipped to the contractor's warehouse prior to the approval of the vendor's construction drawings. A QA inspection, which was requested by Burns and Roe, indicated a nameplate voltage of 125 VDC just as shown on the vendor's drawing.

Safety Implications

A. Design Deficiency

A review of Burns and Roe design procedure indicates that although the construction drawings, E-540, Sheets 1 and 2, were issued for construction before the receipt of the vendor's termination information, the external cables could not have been terminated incorrectly by the electrical contractor. Burns and Roe procedure includes the review of the vendor's drawings as part of the design process. The vendor's drawings must be marked approved or approved as noted by Burns and Roe prior to construction and consequent shipment of any component supplied by the contractor. The discovery of the inconsistent interface connections was, in fact, made during the above review process. The design is deficient only in that the connections for the subject motor operations, as shown in the connection diagrams, were not placed under "hold." However, this deficiency could not have resulted in an unsafe condition for plant operation as explained above. Hence, it is not reportable under 10CFR50.55(e).

B. Non-complying Component

The motor operator for Valve RCIC-V-69, as shipped, represents a non-complying component in that the nameplate voltage is not the correct voltage, as specified in the contract specifications. However, the Interim Material Receiving report dated June 30, 1980 shows that the equipment had not been inspected and accepted by the contractor when the non-compliance was discovered. This discovery was made by the Architect-Engineer while reviewing vendor's drawings submitted for approval. Although the equipment was shipped by the supplier and received at the Pasco warehouse, it has not been dedicated as a plant basic component. Hence, the above non-compliance is outside of the scope of, and is not reportable under, 10CFR50.55(e).

Corrective Action

- A. As discussed above, the design deficiency is not reportable under 10CFR50.55(e). However, Burns and Roe connection/wiring diagrams will be corrected to match the vendor's wiring diagram. The procedure of placing a "hold" on unresolved portions of a design drawing has always been a part of Burns and Roe design procedure and will be implemented where they are found to be inadvertently omitted.
- B. The non-complying component will be returned to the supplier for replacement with the correct one. The estimated completion date is by August 3, 1981. The Contract 215 Procedure WP-786, Revision 3, Control of Purchase Order on Sub-Contractors, Paragraph 4.6.1 and 4.6.2, was revised to help ensure that all specification changes are transmitted to the component supplier.

