

APPENDIX A

Brown Boveri Electric, Incorporated
Distribution Apparatus Division
Docket No. 99900743/82-01

NOTICE OF NONCONFORMANCE

Based on the results of an NRC inspection conducted on October 6 and 7, 1982, it appears that certain of your activities were not conducted in accordance with NRC requirements as indicated below:

Criterion V of Appendix B to 10 CFR Part 50 states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Nonconformances with these requirements are as follows:

- A. Test Procedure No. RC-3047, Revision 8, dated August 23, 1978, contains the following requirements:
1. Paragraph 2.4 states, "Change to 48Vdc control power and depress test button and check for orange target and relay operation." The attendant data sheet states, in part, "Change to 48VDC Test _____."
 2. Paragraph 3.1 states, in part, "Select 110V tap and adjust R13 full C. W., vary input volts to find pickup point . . . and record on data sheet (115V min.)."

Contrary to the above:

1. Data had not been entered in the data sheets dated March 27, 1982, to indicate the change to 48Vdc control power for the following completed units: (1) Catalog No. 211B4175D, Serial Nos. 2128 and 2173; and (2) Catalog No. 211B6175D, Serial Nos. 2397, 2473, and 3001.
2. The voltage value recorded in the data sheet dated March 27, 1982, for Catalog No. 211B6175D, Serial No. 3001, did not satisfy the minimum requirement of 115 volts as evidenced by the recording of "1" in the data sheet.

- B. Quality Assurance Procedure (QAP) No. 3.4H, Revision 0, dated December 20, 1978, contains the following requirements, "to control the release of new or revised engineering drawings for use by the Manufacturing Department":

1. Paragraph 3.1 states, in part, "When the draftsman has completed preparing the drawing(s), a release form . . . is filled out to indicate what is being released and what actions are required."
2. Paragraph 3.2 states, "The drawings and release form are then checked by the engineer requesting the work, and signed and dated to indicate acceptance."
3. Paragraph 3.3 states, "The drawing and release form are then reviewed by the Engineering manager or his representative, and signed and dated to indicate approval."

Contrary to the above, regarding engineering drawings that had been released to accomplish modification tasks (of customer returned hardware) by the Manufacturing Department:

1. Release forms had not been filled out to indicate what was being released and what actions were required.
2. The drawings had not been approved by the Engineering Manager or his representative, as evidenced by the signature of the Quality Assurance Manager in the approval block of the drawings.

The foregoing pertains to the following drawings which are examples:

(1) 211-001, Revision 0, dated April 14, 1981; (2) 211-002, Revision 0, dated April 4, 1981; (3) 211-004, Revision 1, dated October 13, 1981; (4) 211-005, Revision 2, dated June 26, 1981; and (5) 211-007, Revision 1, dated April 14, 1981.

- C. Paragraph 3.4 of QAP No. 10.9H, Revision 0, dated January 2, 1979, states, in part, "The following inspections are documented and controlled. 10.9.1 Wave solder inspection . . . 10.9.2 Sub-assembly inspection."

Contrary to the above, wave solder and subassembly inspections had not been documented, as evidenced by the lack of records to indicate accomplishment of these activities.

- D. Paragraph 3.4 of QAP No. 10.1H, Revision 0, dated December 19, 1978, states, "When modification, repairs or replacements are required after final inspection or testing, there shall be reinspection and retesting of any characteristics affected."

Contrary to the above, reinspection of affected characteristics (component removal/replacement and hand soldering) had not been performed on hardware returned by the Tennessee Valley Authority for modification, as evidenced by the lack of inspection records to confirm accomplishment.

- E. Paragraph 3.1 of QAP No. 5.1H, Revision 0, dated January 4, 1980, states, "Management and Supervisory personnel shall be responsible to assure that all activities affecting quality are prescribed in a documented form appropriate to the circumstances. The activity may be prescribed in job specifications, work instructions, drawings, job tickets, planning sheets, procedures, manuals, or any written form that provides an adequate description of the activity."

Contrary to the above, management and supervisory personnel had not assured that all activities affecting quality had been prescribed in a documented form, as evidenced by the noninitiation of the following QAP's which appeared in the indices of various sections of the QAP Manual (Nos. 10.9.2, "Subassembly Inspection," 9.2.4, "Component Mounting Methods," 6.2H, "Control of Inspection and Test Procedures," and 15.3H, "Repair and Modifications").

With the exception of QAP 6.2H, the indices reflected revision levels and dates for the aforementioned documents.