UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

PSR - Mfg

27 SEP 1978

Docket No. 99900283/78-01

Boston Insulated Wire and Cable Company
ATTN: Mr. E. Manchester, Jr.
President
65 Bay Street
Boston, Massachusetts 02125

Gentlemen:

This refers to the QA Program inspection conducted by Mr. W. E. Foster of this office on July 24-27, 1978, of your facility at Boston, Massachusetts associated with the manufacture and fabrication of wire and cable and to the discussions of our findings with Mr. J. Rath and members of your staff at the conclusion of the inspection.

This inspection was made to confirm that, in the areas inspected, your QA program is being effectively implemented. The inspection effort is not designed to assure that unique quality requirements imposed by a customer are being implemented; nor to assure that a specific product, component or service provided by you to your customers, is of acceptable quality. As you know, the NRC requires each of its licensees to assume full responsibility for the quality of specific products, components or services procured from others. You should therefore not conclude that the NRC's inspection exempts you from inspections by an NRC licensee or his agents nor from taking effective corrective action in response to their findings.

Areas examined and our findings are discussed in the enclosed report. Within these areas, the inspection consisted of examination of procedures and representative records, interviews with personnel, and observations by the inspector.

During the inspection it was found that the implementation of your QA Program failed to meet certain NRC requirements. The specific findings and references to the pertinent requirements are identified in the enclosures to this letter.

Please provide us within thirty (30) days of your receipt of this report a written statement containing, (1) a description of steps that have been or will be taken to correct these items, (2) a description of steps that have been or will be taken to prevent recurrence, and (3) the date your corrective actions and preventive measures were or will be completed.

In addition to the current findings, we determined that you failed to take satisfactory corrective action relative to Deviation No. D.3.a.(1) identified in our letter dated June 22, 1977, and its attachment. Specifically, your letter of July 18, 1977, stated that documentation would be indicated by having the person reviewing the contract initial, date, and affix his QC stamp to the checklist. As shown in the attached inspection report, this commitment had not been completely implemented. Consequently, in your response, please inform us of steps that have been or will be taken to assure that management commitments to take corrective action will be accommodated in the future.

In accordance with Section 2.790 of the Commission's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter with enclosure and your reply, together with the enclosed inspection report will be placed in the Commission's Public Document Room. If this report contains any information that you believe to be proprietary, it is necessary that you make a written application within thirty (30) days to this office to withhold such information from public disclosure. Any such application must include a full statement of the reasons on the basis of which it is claimed that the information is proprietary, and should be prepared so that proprietary information identified in the application is contained in a separate part of the document. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

Karl V. Seyfrit

Karl V. Seyfrit
Director

Enclosures:
1. Notice of Deviation
2. Inspection Report No. 99900283/78-01

Boston Insulated Wire and Cable Company
Docket No. 99900283/78-01

NOTICE OF DEVIATION

Based on the results of an NRC inspection conducted on July 24-27, 1978, it appeared that certain of your activities were not conducted in full compliance with NRC requirements as indicated below:

A. Boston Insulated Wire and Cable Company's corrective action response letter of July 18, 1977, states in part, "Documentation will be indicated by having the person reviewing the contract initial, date, and affix his QC stamp to the check list." Effectivity date is June 13, 1977.

Contrary to the above, the following checklists had not been initialed:

Order Nos./Dates	Order Nos./Dates
84034 - April 19, 1978	84087 - May 1, 1978
84033 - April 19, 1978	84086 - April 19, 1978
84075 - April 3, 1978	

B. Criterion V of Appendix B to 10 CFR 50 states in part, "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."

Paragraph 4.0 of the Shop Floor Traceability procedure identifies critical materials while paragraph 5.1 requires using BIW Quality Control Requirements for Suppliers Spec. QCS 100.

Contrary to the above, BIW Quality Control requirements for Suppliers Specification, QCS-100, could not be found.

See Details Section, paragraph B.3.

C. Criterion IV of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services . . . . To the extent necessary, procurement documents shall require contractors or subcontractors to provide a quality assurance program consistent with the pertinent provisions of this appendix."

Section 5. of ANSI N45.2-1971, states in part, "Procurement documents shall include provisions for the following, as applicable: (1) Supplier Quality Assurance Program . . . (2) Basic Technical Requirements . . . (3) Source Inspection and Audit . . . (4) Documentation Requirements . . . (5) Lower Tier Procurements . . . ."

Paragraph 4.1 of the Quality Control Manual states in part, "All nomenclature and requirements (codes, standards, quality control plans, etc.) are included in the purchase order documentation . . . ."

Paragraph 4.2 of the Quality Control Manual states in part, "Purchase Requisitions and orders are screened by the Quality Control Department . . . ."

Contrary to the above:

1. Purchase orders did not include provisions for quality assurance and audits, e.g., BIW Purchase Orders 3-3876, dated February 1, 1978; 1-9781, dated March 27, 1978; 1-8908, dated February 1, 1978; and 3-9840, dated March 30, 1978. All of these orders involved items important to safety.

2. Purchase requisitions are not screened by the Quality Control Department.

See Details Section, paragraph C.3.c.

D. Criterion V of Appendix B to 10 CFR 50 states in part, "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."

Paragraph 2.8 of Final Inspection Procedure No. 1 states, "Each reel is given an electrical and visual inspection by Final Inspection to assure that it is complete, free of defects, and that all previously required tests and inspections have been performed."

Contrary to the above, no electrical inspections are performed by Final Inspection to assure that each reel is free of defects.

E. Criterion VI of Appendix B to 10 CFR 50 states in part, "Measures shall be established to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto,

which prescribe all activties affecting quality. These measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel and are distributed to and used at the location . . . ."

Additionally, Section 7. of ANSI N45.2-1971 requires the measures to be documented.

Contrary to the above, measures had not been documented to control the issuance of drawings; e.g., drawings 11316-H-010, Revision E, December 5, 1977, and 12495-H-024, June 22 and 27-28, 1978, were located in the Engineering files without approval signatures.

See Details Section, paragraph E.3.c.

F. Criterion VI of Appendix B to 10 CFR 50 states in part, "Measures shall be established to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto, which prescribe all activities affecting quality. These measures shall assure that documents, including changes, are reviewed for adequacy and approved for release by authorized personnel . . . ."

Paragraph 6.4 of the Quality Control Manual requires that a copy of the Specification Change Notice (SCN) accompany the Manufacturing Specification until the manufacturing step is changed. Additionally, paragraph 6.5 requires Product Design Engineer approval of Manufacturing Specification changes.

Contrary to the above:

1. Specification Change Notices (for changes D and E) were not accompanying Manufacturing Specification for Order No. 74016/B3, Part No. 11316-H-010, Change C, and the manufacturing step had not been changed.

2. The following Manufacturing Specification changes had been released to manufacturing but had not been approved by the Product Design Engineer:

Part No./Change	Part No./Change
11734-C-G22 A	9506-R-040 B
12150-H-002 A	9507-R-016 B