U. S. NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT REGION IV

Report No.

99900289/80-02

Program No. 51300

Company:

Nuclear Valve Division Borg Warner Corporation

7500 Tyrone Avenue

Van Nuys, California 91409

Inspection Conducted: May 5-9, 1980

Inspectors:

J. W. Sutton, Contractor Inspector

5/21/80 Date

Components Section I

Vendor Inspection Branch

D. E. Whitesell, Chief Components Section I Vendor Inspection Branch

Summary

Inspection on May 5-9, 1980 (Report No. 99900289/80-02)

Areas Inspected: Implementation of 10 CFR 50, Appendix B and applicable codes and standards, including action on previous inspection findings, follow-up on reported documentation deficiency on CMTRs for bolting materials, NDE procedures and qualification of NDE personnel. The inspection involved twenty-four (24) inspector hours on-site by one (1) NRC inspector. Results: In the areas inspected no apparent deviations or unresolved items were identified.

DETAILS

A. Persons Contacted

Nuclear Valve Division - Borg-Warner Corporation (NVD)

- P. L. Milinazzo, Manager Fabrication Inspection
- *N. J. Moore, Manager Quality Engineering
- A. P. Tartaglia, Level III Supervisor
- *W. R. Wheaton, QA Director

*Attended Exit Interview.

B. Action on Previous Inspection Findings

(Closed) Deviation (Report No. 80-01): Measures had not been established to control use of temporary attachment.

The inspector reviewed an instruction dated May 1, 1980, titled "Welding of temporary attachments to components" that outline the steps to be taken to attach and remove temporary attachments.

The inspector further reviewed shop implementation of the instruction for compliance. The records reviewed demonstrated compliance to the instruction.

C. Follow-up of reported documentation Deficiency

Bolting materials CMTR's compliance to ASME Section III Material Requirements

a. Background Information

Region IV Vendor Inspection Branch was notified by RV that a Bechtel audit of Coast Industrial Supply Company (CISCO) on June 21, 1979 resulted in a finding that the CMTRs furnished for bolting material, heats Nos. 83121, 52241, 51605, 6024194, 826338 and 52258 may not be adequate to assure compliance with Section III, Article NCA 3867.4.

CISCO's record search to identify nuclear customers to whom they may have furnished suspected bolting materials, included NVD, Borg-Warner, bolts, NVD was notified of the problem and the Purchase Order numbers were identified.

b. Objectives

The objectives of this area of the inspection was to ascertain whether CISCO had supplied NVD with any bolts with diameters larger than one incn, manufactured from the heats of the suspected materials, identified in the Bechtel Audit reports.

Method of Accomplishment

The above objectives were accomplished as follows:

- a. Review of Purchase Orders No. 14628-2F84, Heat No. 6055603; P. 0. 14624-2K41, Heat No. 6055462; P. 0. 14625 2K21, Heat No. 6055462; P. 0. 15335 2N93, Heat No. 823752, P. 0. 15336 2M79, Heat No. 45584, P. 0. 9939 3A73, Heat No. 14410; and P. 0. 17106 3J34, Heat No. 17252, to compare material, and heat Nos. of the bolting materials received by NVD, with the heat nos. of the suspected materials.
- b. Review of CMTRs, indicated that only four (4) P. Os, were for bolts over 1 inch in diameter. The CMTRs were included in the four packages reviewed and for bolts under 1 inch in diameter, the certificates of compliance were included in the document packages.
- c. The results of NVDs review of its P. Os to CISCO.
- d. Discussions with NVD Purchasing and QA Personnel.

3. Findings

The document reviewed and discussion with cognizant personnel resulted in the following findings:

- a. CISCO had notified NVD of the problem and NVD initiated a search and review of the documentation of all bolting materials supplied by CISCO. From these records it was determined that NVD had not received any bolts from CISCO, which had been manufactured from the suspected heats of materials identified in the Bechtel Audit.
- b. NVD had alerted its Purchasing and QA personnel concerning the need for in-depth review of purchase orders to assure that all quality requirements specified by the code and customer is included.

D. Nondestructive Examination (NDE) Personnel Qualifications

1. Objective

The objective of this area of the inspection was to verify that NVD had implemented the requirements for the qualification and certification of NDE personnel in accordance with the QA Manual and applicable NRC and ASME Code requirements.

2. Method of Accomplishment

The preceding objective was accomplished by:

- a. Review of QA Manual Section 10.8 "Nondestructive Examination," to verify that special processes are performed by qualified personnel using qualified procedures.
- b. Review of eighteen (18) NDE personnel qualification records.
- c. Review of SNT-TC-1A, 1975, "Personnel Qualification and Certification in Nondestructive Testing."
- d. Review of the Generic Procedure Index.
- e. Review of NDE Procedure Qualification for NDE Procedures, NPB 6-1, 6-2 and 6-5, for Penetrant, Magnetic Particle and Radiographic examination.
- f. Review of Nuclear Protective Bulletin 6-6
- g. Discussion with Level III Examiners

3. Findings

a. Deviation

None

b. Unresolved Item

None

c. General

The evidence reviewed demonstrated that special processes are being performed by qualified personnel, using qualified procedures, consistent with the regulations, Code, and contract commitments.

E. Penetrant Examination (PT)

1. Objectives

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The objectives of this area of the inspection were to verify that:

- a. Nondestructive examination is performed in accordance with approved qualified procedures.
- b. The nondestructive examination procedures meet the requirements of Section V of the ASME Code.
- c. The test results are interpreted by qualified personnel.

Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of Section 10.8.10, 11, 12, 13 of the QA Manual.
- J. Review of NDE Procedure 6-1, Rev. K, Penetrant Color Contrast.
- c. Review of Plant Release 51420-W0936-40 and 48956-W014925-40.
- d. Review of Nuclear Test Summary TP156FACY-001 W010643-40.
- e. Review of documentation of results of Penetrant Testing on Report Form 400-141 (Rev.4-79).
- f. Review of Certifications for Penetrant Developer and remover for the following:

1C820 (PO 34980) Pene;

Developer - D-100 (PO 34426) Solvent;

Remover DR60 - 4F703, DP-40 (1F709)

- g. Observation of work in progress.
- h. Discussion with inspection personnel to verify that they are knowledgeable of NDE procedures, requirements, and the acceptance limits.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

F. Exit Interview

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The inspector met with management representative (denoted in paragraph A) at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection. The management representatives had no comment in response to the items discussed by the inspector.