



BW/IP International, Inc.

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Pumps

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Pumps

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April 13, 1994

Leif J. Norrholm, Chief, Vendor Inspection Branch
Division of Reactor Inspection and Licensee Performance
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

Reference: a) Docket No. 99900030/93-01
b) Letter Leif J. Norrholm to Peter C. Valli dated March 14, 1994

Dear Mr. Norrholm;

Peter C. Valli, Chairman and Chief Executive Officer of BW/IP International, Inc. (BW/IP), requested that I respond to your March 14, 1994 letter addressed to him.

Enclosed is BW/IP's response to the Nuclear Regulatory Commission's notice of nonconformance and inspection report which were attached as Enclosures 1 and 2 to your March 14 letter.

Very Truly Yours,

David A. Gibson
Manager, Los Angeles Operations

cc: P.C. Valli

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BW/IP International, Inc.
Response To
United States Nuclear Regulatory Commission
Notice of Nonconformance A thru D

Nonconformance 93-01-01

The NRC States:

Criterion V of Appendix B to 10 CFR Part 50, "Instructions, Procedures, and Drawings," states, in part, that 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.

BW/IP Procedure L-A-16, "Product Defect Reporting In Compliance with 10 CFR Part 21 Requirements," dated March 9, 1990, states in "General," that a defect report must be sent to both the NRC and any affected purchaser. Item 21 of "Procedure," also states that the Cognizant Project Manager advises purchasers or licensees with like equipment which may be subject to the reported defect.

Contrary to the above, BW/IP could not produce documentation to support notification to 5 of 15 licensees of the results of BW/IP's 10 CFR Part 21 Evaluation Board for Deviation CFR 91-004. The Deviation related to cast components supplied by ACME Castings, Incorporated (ACME), who failed to pass down the requirements of 10 CFR Part 21 to its subvendors providing heat treatment services, and had an unacceptable 10 CFR Part 50, Appendix B, quality assurance program. BW/IP reported the defect to the NRC on October 2, 1989.

A review of the BW/IP Deviation Evaluation Summary Sheet indicated closure of the evaluation on October 2, 1991, and also requested program managers to notify 15 pump and valve customers of the Board's results. The notification states that in the absence of supporting documentation, the potential exists for improper heat treatment of items produced by ACME and recommended that inspections be performed to assure that the parts will perform their intended safety function.

BW/IP Response

BW/IP Evaluation CFR 91-004 included many valve and pump components and affected many utilities. As a result, the reporting responsibility involved several Cognizant Project Managers, one of which failed to advise purchasers as required.

CORRECTIVE ACTION:

BW/IP Procedure L-A-16, "Product Defect Reporting In Compliance with 10 CFR Part 21 Requirements," dated March 1, 1994, supercedes BW/IP Procedure L-A-16, dated July 29, 1992. The new Procedure incorporates a revision to the reporting sequence (Item 24) which requires the Cognizant Project Manager to provide the Evaluation Board with copies of all required transmittals to purchasers or licensees.

SCHEDULED DATE:

Complete

Nonconformance 93-01-02

The NRC States:

Criterion V of Appendix B to 10 CFR Part 50, "Instructions, Procedures, and Drawings," states, in part, that 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.

BW/IP Policy and Procedure L-A-16, "Reporting of Defects and Failures to Comply in Nuclear Products and Services," dated July 29, 1992, (which supersedes L-A-16, dated March 9, 1990), states, in Item 23 of "Procedure," that the Cognizant Project Manager advises purchasers or licensees with like equipment which may be subject to the defect.

Contrary to the above, the inspectors identified two instances (NRC 93-055 and 93-057, and NRC-071) in which BW/IP notified the NRC of known check valve defects (CFRN-9301, dated February 12, 1993, and CFRN-9302, dated February 18, 1993), yet did not notify its customers of the defect until November 30, 1993, after the NRC contacted BW/IP concerning the scope of the December 6, 1993, inspection.

BW/IP Response

BW/IP Evaluation CFR 93-001 and CFR 93-002 were completed within the 60 day limit prescribed by 10 CFR Part 21. Defect Notification reports were submitted to the NRC by the Responsible Officer within the required two day period following identification of a Defect. Both reports were transmitted in February, 1994. BW/IP advised purchasers of the NRC Defect Notification report on November 30, 1994, after the reporting omission was discovered during a review of all Evaluations in preparation for the December NRC inspection.

BW/IP Procedure L-A-16, "Product Defect Reporting In Compliance with 10 CFR Part 21 Requirements," dated July 29, 1992, does not prescribe a time in which purchasers are to be notified of filings of Defect Notification reports to the NRC.

CORRECTIVE ACTION:

BW/IP Procedure L-A-16, "Product Defect Reporting In Compliance with 10 CFR Part 21 Requirements," dated March 1, 1994, supercedes BW/IP Procedure L-A-16, dated July 29, 1992. The new Procedure incorporates a revision to the reporting sequence which clarifies superceded procedure Item 22 and adds a new Item 23 which defines a 30 day time limit in which purchaser reporting is to be completed.

SCHEDULED DATE:

Complete

Nonconformance 93-01-03

The NRC States:

Criterion VII of Appendix B to 10 CFR Part 50, "Control of Purchased Material, Equipment and Services," requires, in part, that measures shall be established to assure that purchased material, equipment, and services conform to the procurement documents.

BW/IP Specification PS-1535, paragraph 3.3.3, which is referenced as a procurement document in Purchase Order (PO) V 407811, dated April 28, 1992, to Delta Centrifugal Corporation for ASTM A-743 castings, limits the maximum hardness level of Type 420 castings to 255 Brinell hardness number (BHN).

Contrary to the above, on June 17, 1992, BW/IP quality control accepted a Type 420 casting procured under this PO having a hardness of 262 BHN as indicated on the Certified Material Test Report (CMTR).

BW/IP Response

The referenced material was procured for stock against an anticipated future need. While this material is typically used in commercial applications, to support the possible use in a nuclear environment it was ordered with the administrative and programmatic requirements of 10 CFR 50 appendix B and 10 CFR 21. The technical specification limits the material hardness to ensure that it is easy to machine prior to heat treatment to its final value of Rc 45-50. The quality engineer who accepted the material was aware of the additional processing which would be performed on the material and made a judgmental decision to accept the material and failed to

document the nonconformance as required by the BW/IP quality assurance program.

CORRECTIVE ACTION

All personnel who are authorized to review and accept quality records have been reinstructed that they must document all nonconformances to purchase order and technical requirements as required by the BW/IP quality assurance program regardless of their knowledge of end use of further processing which may occur.

The usage of the subject material has been reviewed and it has been determined that the complete billet was used in non-nuclear application.

SCHEDULED DATE:

Complete

Nonconformance 93-01-01

The NRC States:

Criterion VII of Appendix B to 10 CFR Part 50, "Control of Purchased Material, Equipment, and Services," requires, in part, that measures shall be established to assure that purchased material, equipment, and services conform to the procurement documents.

Paragraph B of BW/IP PO V 413444, dated January 11, 1993, to Nova Machine Products Corporation (NOVA) for eight ASME SA-193 Grade B6 studs, requires that if subtier suppliers not holding ASME Quality System Certificates are used, their quality system program revision and date and the name of the approving organization to whom the material is being supplied must appear on the subtier CMTR. Paragraph K of the same PO requires the identification of the mill supplying the material.

Contrary to the above, the material certification provided by NOVA for this material did not identify the supplying mill or identify the mill's quality system program or the approving organization.

BW/IP Response

An informal survey performed by the BW/IP Manager of Quality indicated that the instructions on the purchase order were not completely clear, and had not conveyed the intent of the requirement to either sub-tier suppliers or BW/IP personnel.

CORRECTIVE ACTION

The text which is included in all purchase orders for all ASME materials has been reviewed and rewritten to clearly define BW/IP's intent. BW/IP Quality personnel authorized to accept vendor documents have been instructed on the revised purchase order language and its intent.

SCHEDULED DATE:

Complete