



**AMER
INDUSTRIAL
TECHNOLOGIES INC.**

September 28, 1996

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Subject: **Reply to a Notice of Violation** - NRC INSPECTION NO.
99901292/96-01

Reference: Letter dated March 21, 1996 from Gregory C. Cwalina to Ahmad E.
Amer

Gentlemen:

In response to the above referenced letter, Amer Industrial Technologies, Inc. is submitting herewith its reply to the subject Notice of Violation. A reply to the NRC's Notice of Nonconformance, dated March 21, 1996, is also being prepared, and will be submitted under separate cover.

Please respond directly to the undersigned with any questions or comments.

Sincerely,

Amer Industrial Technologies, Inc.

Ahmad E. Amer
Chairman

Enclosure: Reply to a Notice of Violation - NRC INSPECTION NO.
99901292/96-01

cc: Chief, Special Inspection Branch
Division of Technical Support
Office of Nuclear Reactor Regulation

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ID#R-13

Vendor
Inspections

Reply to a Notice of Violation

September 28, 1996

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NRC Docket No.: 99901292
NRC Report No.: 96-01

The NRC's Notice of Violation, dated March 21, 1996, states that during an NRC inspection conducted at Amer Industrial Technologies' Wilmington, Delaware facility on January 29 through February 2, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 21.21(a) requires, in part, that each corporation subject to the regulations shall adopt appropriate procedures to ensure the evaluation of deviations within 60 days of discovery, the submittal to the NRC of an interim report if the evaluation cannot be completed within 60 days, and the reporting to a responsible official of a defect or a failure to comply related to a substantial safety hazard within 5 working days of completing the evaluation.

Contrary to the above, (1) Amer Industrial Technologies, Inc. (AIT) document, "Procedures for Compliance With 10 CFR Part 21," dated April 27, 1993, which described the AIT policy for compliance with 10 CFR Part 21 did not provide for evaluation and reporting in accordance with 10 CFR 21.21(a), and (2) AIT performed inadequate and incomplete evaluations to determine if a defect or failure to comply associated with a substantial safety hazard existed. The evaluations consisted of three Interoffice Memos from the QA Manager to the AIT President that stated that none of the findings from the December 5-7, 1994, and the June 26-28, 1995, ASME surveys contained issues that should have been reported to the NRC per 10 CFR Part 21.

AIT Reply to item (1) above:

1. Reason for the violation or, if contested, the basis for disputing the violation: Amer Industrial Technologies' "Procedures for Compliance with 10 CFR Part 21," dated April 27, 1993, which described the AIT policy for compliance with 10 CFR 21, was found inadequate, during the NRC inspection, to meet all requirements of 10 CFR 21.
2. Corrective steps that have been taken and the results achieved: This procedure has been replaced by Procedure No. QA-1, Rev. 1, "Evaluating and Reporting Defects and Noncompliances in Accordance with 10 CFR 21," dated February 10, 1996. QA-1, Rev. 1 defines the required reportability guidelines, and the actions to be taken upon discovery of a possible defect. QA-1 also specifies the reporting requirements and timetable for all required activity, in full compliance with 10 CFR 21.

QA-1 was revised on February 10, 1996, and Rev. 1 was issued on February 13, 1996. A copy was submitted to the NRC at that time. It was then posted in both the main AIT office and the Shop Bulletin Board. Training was provided to all AIT personnel involved in quality activities.

Also, the AIT Nonconformance Report (NCR) form was revised to add a "prompt" for 10 CFR Part 21 evaluation.

3. Corrective steps that will be taken to avoid further violations: All corrective steps have been taken.
4. Date when full compliance will be achieved: Full compliance was achieved with the issuance on February 13, 1996 of QA-1, Rev. 1, and issuance of the revised NCR form described above. New personnel are provided with a copy of QA-1, Rev. 1 to review prior to meeting with the QA Manager.

AIT Reply to item (2) above:

1. Reason for the violation or, if contested, the basis for disputing the violation: In evaluating the findings from the December 5-7, 1994 and June 26-28, 1995 ASME surveys, the then-current AIT procedure, entitled "Procedures for Compliance with 10 CFR 21," dated April 27, 1993, was followed - inasmuch as an assessment was made of the Nonconformance Reports (NCR's) associated with these surveys to identify any possible 10 CFR Part 21 applicability. The procedure required AIT employees to report any deficiencies in nuclear jobs to the company president, so that he or his designee could notify the customer and the NRC as required under 10 CFR Part 21. This resulted in the issuance of Nonconformance Reports which were then dispositioned according to AIT's ASME-approved Quality Assurance Program.

Most of the Nonconformance Reports associated with the ASME surveys dealt with programmatic issues which did not affect any hardware item, but five (5) of the NCR's addressed specific hardware issues. Three (3) of the five concerned projects currently in progress at AIT, and have been processed in-house under AIT's approved QA Program. One of the two remaining NCR's (No. N442-1) concerned South Carolina Electric & Gas Company Purchase Order No. Q65 0395, "Charging Pump Gear Oil Heat Exchanger," (AIT Job No. N442). The other (No. N383-6) concerned two strainers supplied to Taprogge America Corporation (AIT Job No. N383). Both of these NCR's were generated during the December 5-7, 1994 ASME Survey.

The first of these, NCR N442-1, addressed two items. The first of these dealt with the unavailability of "No Welding" certifications for some

upgraded materials. AIT has since obtained corrected CMTR's, containing the "No Welding" certifications, from the suppliers of these materials. The second item cited mechanical tests which had not been performed for 35 of the 36 tubes used in the construction of the heat exchanger. (This is the item cited in Paragraph B.2 of the NRC's Notice of Nonconformance dated March 21, 1996, and discussed in Paragraph 3.4.1.3.1 of NRC Inspection Report 99901292/96-01.)

South Carolina Electric & Gas Company Purchase Order No. Q65 0395 specified compliance with 1971 ASME Boiler & Pressure Vessel Code requirements. Accordingly, the 36 pieces of 0.5 inch O.D., TP316, SA249 tubes were procured from Marmon/Keystone Corporation located in New Castle, Delaware, with the intent to upgrade to the requirements outlined in ASME Code, Section III, Class 3, 1971 Edition.

Previously, on March 9, 1992, the AIT QA Manager had issued a memo to A. E. Amer, with a copy to AIT's Authorized Nuclear Inspection Supervisor, Bill Rogers, which established upgrading requirements for pressure-retaining material purchased in the absence of audited verification of the vendor's QA/QC program, consistent with the 1971 ASME Code requirements. This memo specified one chemical and one physical test sample per heat lot per CMTR. This was the method chosen by AIT for upgrading of the 36 tubes procured from Marmon/Keystone.

The AIT Traceability No. M-2627 was assigned after completion of receiving inspection, review of material certifications on July 17-20, 1994, and hydrostatic testing of one tube. Paragraph NA-3711(b) of the 1971 ASME Code, Section III, applicable to this order, states that "...the material supplier shall have his Identification and Verification Program or Quality System Program surveyed and qualified by the Manufacturer..."

AIT conducted a Vendor Qualification Survey of Marmon/Keystone Corporation on May 2, 1994 before issuing P.O. 20681 dated May 17, 1994. This survey checked Marmon/Keystone's material identification traceability program's compliance with ASME Code and accepted it. Accordingly, Marmon/Keystone was added to the AIT Approved Vendor's List for the supply of tubing. AIT conducted the upgrading process in accordance with AIT QA Manual Rev 9, Paragraph 17.2.7.1 which allowed testing of each heat lot provided that (a) a CMTR from the manufacturer, and traceability from the material to the CMTR, is maintained, (b) AIT procurement documents address the supplier's traceability procedure, (c) AIT reviews and accepts the supplier's identification and traceability procedures, (d) AIT performs or subcontracts a product analysis to verify the chemical composition of each piece of unqualified source material, and (e) no welding is permitted on the material.

Although it was established at the time of the vendor survey that Marmon/Keystone's QC Manual was to be invoked on P.O. 20681, it was not specifically addressed in the P.O. AIT Corrective Action Report (CAR) 96-30 was issued to address this concern.

In conclusion, upgrading of the heat exchanger tubes in question required only one hydrostatic test, which was performed; verification of physical testing on one sample, which was performed; and chemical analysis on samples from each of the 36 pieces of tubing, which was performed. The applicable hydrostatic test records were, in fact, available as required by Code and 10 CFR 50, Appendix B - thus negating Nonconformance 99901292/96-01-06 of the NRC's Notice of Nonconformance dated March 21, 1996.

NCR N442-1 was written during the December 5-7, 1994 ASME Survey to resolve a survey team finding. AIT did not at that time, nor does it now, believe that upgrading was performed incorrectly. Testing performed during the upgrade of this material demonstrates conclusively that the material satisfies 1971 ASME Boiler & Pressure Vessel Code requirements.

The second of the NCR's in question, NCR 383-6, addressed two items. The first of these dealt with an apparent lack of objective evidence of hydrostatic testing being performed as part of the upgrade process. The second item cited the lack of "No Welding" certification for some upgraded materials.

NCR 383-6 was dispositioned "accept as is" with the following justifications:

- A. The customer has acknowledged and accepted the non-duplication of the specification-required hydrostatic test. Acceptance by AIT, its ANI and its customer is based on the fact that the pipes were successfully hydrostatically tested, during the Code-required hydrostatic test, at 1 1/2 times the design pressure of the vessel.
- B. Regarding the unavailability of "No Welding" certifications for some upgraded materials. AIT has since obtained the "No Welding" certifications, from the suppliers of these materials. These are attached to the applicable Mill Test Reports.

All records substantiating the above are on file at AIT.

2. Corrective steps that have been taken and the results achieved: See above discussion. None of the findings from the December 5-7, 1994, and the June

26-28, 1995, ASME surveys contained issues that should have been reported to the NRC per 10 CFR Part 21.

3. Corrective steps that will be taken to avoid further violations: All corrective steps have been taken.
 4. Date when full compliance will be achieved: Full compliance has been achieved.
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As a result of the NRC Inspection, AIT was made aware of a potential concern regarding Bechtel Power Corporation P.O. CCDG0767, dated February 10, 1995, (AIT Job No. 523) for ten filter cartridges for fuel oil filters supplied under Bechtel's P.O. CCDG0065 (AIT Job No. 392) for Calvert Cliffs Nuclear Power Plant. (This is the item cited in Paragraph D, labeled Nonconformance 99901292/96-01-05, of the NRC's Notice of Nonconformance dated March 21, 1996, and discussed in Paragraph 3.4.1.2 of NRC Inspection Report 99901292/96-01.)

1. Reason for the violation or, if contested, the basis for disputing the violation: Bechtel's P.O. imposed Procurement Specification DG-80382, "Procurement Specification for Calvert Cliffs Nuclear Power Plant Diesel Generator Project," Rev. 2, dated December 23, 1994. This specification identified the safety-related fuel oil filters as "basic components" and imposed 10 CFR 21. The procurement specification also required that AIT have a QA Program that conforms with NCA-4000 of the ASME Code for pressure retaining parts, and American National Standards Institute (ANSI) Standard N45.2 for other parts determined to be safety related. The procurement specification also stated that for safety-related non-Code parts (e.g., oil filter cartridges and o-rings) AIT shall either provide a QA program supplement to control the step-by-step processing of these items, or provide a QA program supplement which specifies that AIT's ASME Code QA Program shall be used to process non-Code parts.

Upon reviewing the above, AIT concluded that certain components of the oil filters supplied to Bechtel had been purchased commercially, and had not been dedicated as Safety-Related due to these items not being covered by ASME Code.

2. Corrective steps that have been taken and the results achieved: On February 21, 1996, letters were sent to Bechtel Power Corporation, Baltimore Gas & Electric Company (BG&E), and the U.S. Nuclear Regulatory Commission (USNRC) notifying them of the suspected 10 CFR 21 concern. Correspondence between

AIT and Bechtel resulted in BG&E and Bechtel electing to perform the dedication activities. AIT was notified that the dedications of the oil filter o-rings, filter element, and filter holder were completed in April, 1996. AIT notified the U.S. Nuclear Regulatory Commission on May 29, 1996 that the 10 CFR 21 concern reported by AIT on February 21, 1996 was closed.

AIT also reviewed past jobs or any other material used in the construction of AIT-supplied items and found that no clear distinction had been made as to whether gasket material used to form sealing between bolted connections was safety related or not. An analysis was performed on the failure mode associated with gasket material in general. This analysis concluded that a failed gasket would leak at an increasing rate, but would not prevent the operation of any of the components which had been supplied by AIT. Letters were sent to AIT customers who had been supplied gasketed items, for their information, review and comment.

3. Corrective steps that will be taken to avoid further violations: All corrective steps have been taken.
4. Date when full compliance will be achieved: Full compliance has been achieved.