



SPECTRUM TECHNOLOGIES

a division of **ATC**

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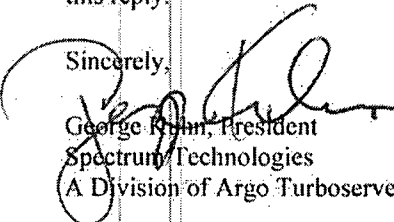
Subject: Reply to Notice of Nonconformance

Reference 1: Letter, Patrick L. Hiland (NRC) to Randy Reynolds (Spectrum Technologies), "NRC Inspection Report 99901119/2008-201, Notice of Nonconformance" September 17, 2008.

Spectrum Technologies, reply to Notice of Nonconformance (Reference 1) is enclosed in Attachment A. Preliminary corrective actions have already been taken while additional actions are in the process of being taken. Spectrum Technologies is confident that these corrective actions will prevent further nonconformance in the subject areas area.

Spectrum Technologies takes this matter with the utmost seriousness and is committed to the action set forth in this reply.

Sincerely,


George Kohn, President
Spectrum Technologies
A Division of Argo Turboserve (ATC), Inc.

Enclosure/Encl: Attachment A Spectrum Technologies Response to NRC Inspection Report 99901119/2008-201

CC: Mr. Paul Prescott, NRR/DE/EQVB

Mr. Robert Lane, VP Operations, Spectrum Technologies, ATC

Mr. Randy Reynolds, Quality Assurance Manager, Spectrum Technologies

Mr. Ray Chaulifoux, Quality Assurance Manager (in transition), Utility Services Division, ATC

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The intent of this document is to provide an acceptable response to the subject inspection report results of the Nuclear Regulatory Commission (NRC) inspection conducted during the period of July 29 to August 1, 2008. This was a limited scope inspection with focus on assessing compliance with the provisions of Part 21 of Title 10 and selected portions of Appendix B-10 CFR Part 50, of activities performed at Spectrum Technologies, a Division of Argo Turboserve's Utility Services Division.

Notice of Nonconformance 99901119/2008-201-01

Criterion III, "Design Control," of Appendix B to 10 CFR Part 50, states in part that, "Measures shall also be established for the selection and review for suitability of application of material, parts, equipment, and processes that are essential to the safety related functions of the structure, systems and components." Additionally, Criterion III states that "The design control measures shall provide for verifying or checking the adequacy of design, such as by performance of design reviews, by the use of alternate or simplified calculation methods, or by the performance of a suitable testing program."

Argo Turboserve Corporation (ATC), Utilities Services Division, Quality Program Manual, Revision 1, dated December 29, 2004, Section 3.0 "Design Control," Paragraph 2.b. states that "Applicable design inputs, quality requirements and standards shall be appropriately specified and correctly translated into specifications, drawings, procedures and instructions."

Spectrum Quality Assurance Procedure QAP-3-001 "Design Control" Revision 4, dated July 6, 2004, Section 2.4 states in part that, "The adequacy of a design shall be checked or verified by the performance of design reviews, by the use of alternate or simplified calculation methods, or by the performance of a suitable testing program."

Contrary to the above, as of August 1, 2008:

Spectrum failed to establish adequate acceptance criterion for the locked rotor current test in Job Number 07P3730/1, dated March 28, 2007, for the 100HP/460VAC Electric Motor to LaSalle Nuclear Power Station for the Exelon Generation Company Order 0042577.

Spectrum Technologies Response to Nonconformance 99901119/2008-201-01

Background:

Nonconformance 99901119/2008-201-01 identifies the requirement for adequate verification of design by the performance of design reviews, by the use of alternate or simplified calculation methods, or by the performance of a suitable testing program. The acceptance procedure and test plan utilized were developed under the guidance of Spectrum Technologies policy and procedure, as well as applicable industry and governmental regulations and standards. Procedures and Test plans must adequately verify design by performance or review. Accurate and complete documentation of the results of inspections and tests must be kept to demonstrate adequacy of design verification.

Reason for the nonconformance:

Performance of the acceptance procedure and test plan associated with the subject nonconformance results in an acceptable dedication. However, the following reason exists for the nonconformance:

The plan for testing the motor included the performance of a Locked Rotor Test, however due to test equipment inadequacies this test was not performed. A Nonconformance Report was prepared and provided with the test plan.

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describing the equipment capabilities. The nonconformance was accepted as is, based upon a brief explanation provided by a qualification engineer. The subject explanation does not meet expectations of design verification by performance of design review or by the use of alternate or simplified calculations and is therefore considered a nonconformance.

Corrective actions:

1. A more detailed engineering analysis supported by calculations has been performed to support the design adequacy of the subject motors locked rotor current. The subject calculation has been independently reviewed and found acceptable.

Complete: October 1, 2008.

Corrective actions to prevent recurrence:

2. Spectrum Technologies QA Program is in revision with implementation planned for November 3, 2008. The requirements concerning the documentation of analysis, "engineering judgment" or experiential decision making are provided in detail in the new Quality procedures. These requirements state in part, when analysis, "engineering judgment" or experiential decision making is to be applied, a supporting basis statement shall be provided.

Scheduled completion date: November 3, 2008

Notice of Nonconformance 99901119/2008-201-02

Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR Part 50, 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

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

ATC, Utilities Services Division, Quality Program Manual, Revision 1, dated December 29, 2004, Sections 5.0 "Instructions, Procedures and Drawings," Paragraphs 2.b, and 2.c. state that, "All activities affecting quality shall be prescribed and performed in accordance with documented instructions, procedures or drawings. Instructions, procedures or drawings shall include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished."

Spectrum Quality Assurance Procedure QAP-5-001, "Control of Instructions, Procedures and Drawings," Revision 6, dated August 2, 2005, Sections 2.1 and 2.2 state that, "All activities affecting quality shall be prescribed and performed in accordance with documented instructions, procedures or drawings. Instructions, procedures or drawings shall include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished."

Spectrum Quality Assurance Procedure QAP-16-001, "Corrective Action," Revision 3, dated September 13, 2005, establishes the process for initially identifying and determining the significance of issues identified in the corrective action request process.

Contrary to the above, until July, 30, 2008:

Spectrum Quality Assurance Procedure QAP-16-001, "Corrective Action," failed to prescribe appropriate procedures to initially identify a deviation for evaluation, as defined in 10 CFR Part 21, "Reporting of Defects and Noncompliance."

Spectrum Technologies Response to Nonconformance 99901119/2008-201-02

Background:

Nonconformance 99901119/2008-201-02 identifies the requirement to identify a material deviation for initial evaluation, as defined in 10 CFR Part 21, "Reporting of Defects and Noncompliance." Although Spectrum does review deviations and nonconformance, the process has not been adequately defined in procedure.

There have been no known cases of a deviation or non conformance not receiving adequate evaluation. The actions taken are to enhance and formalize the existing program to fully meet the requirement and intent of 10 CFR Part 21, "Reporting of Defects and Noncompliance."

Reason for the nonconformance:

Spectrum's processes for the initial evaluation of a deviation or nonconformance have screened and considered items as defined in 10 CFR Part 21, "Reporting of Defects and Noncompliance. However, these processes are not adequately described procedurally. This lack of formal procedures requirements allows for possible misinterpretation and potential oversight in the identification and evaluation process of deviations and noncompliance.

Corrective actions:

1. Spectrum Technologies QA Program is in revision with implementation planned for November 3, 2008. The requirements concerning the identification and evaluation of deviations and noncompliance's have been formally provided in the revised QAP-16-01 "Corrective Actions." All future deviations and nonconformance will be entered into the Nonconformance Program and provided an initial screen within 24 hours. The screen will determine and document the need for further evaluation as defined in 10 CFR Part 21, "Reporting of Defects and Noncompliance." Those items requiring evaluation will be evaluated by a qualified engineer and the evaluation results approved by the Manager of Quality.

Schedule for completion: November 3, 2008

Corrective actions to prevent recurrence:

It is necessary to take appropriate actions to provide assurance that the programmatic and human performance reasons for this noncompliance are properly addressed. This will be accomplished by general training to all employees concerning the implementation of the new QA program, as well as specific training to all technical staff and engineering concerning the procedural requirements.

Scheduled completion date: November 3, 2008

Notice of Nonconformance 99901119/2008-201-03

Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR Part 50, 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

ATC, Utilities Services Division, Quality Program Manual, Revision 1, dated December 29, 2004, Sections 5.0 "Instructions, Procedures and Drawings," Paragraphs 2.b. and 2.c. state that, "All activities affecting quality shall be prescribed and performed in accordance with documented instructions, procedures or drawings. Instructions, procedures or drawings shall include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished."

Spectrum Quality Assurance Procedure QAP-5-001, "Control of Instructions, Procedures and Drawings," Revision 6, dated August 2, 2005, Sections 2.1 and 2.2 state that, "All activities affecting quality shall be prescribed and performed in accordance with documented instructions, procedures or drawings. Instructions, procedures or drawings shall include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished."

Spectrum Procedure GP0060, "Qualification by Similarity Analysis Procedure," Revision 3, dated August 20, 2007, Section 5.2.2, "Metallic Material Components," requires that a Rockwell Hardness test be performed on metallic parts as determined by the Procurement & Qualification Engineer.

Contrary to the above, as of August 1, 2008:

Spectrum failed to perform Rockwell Hardness testing on the identified critical metallic parts for ¾ in, 316 stainless steel ball valves dedicated under Spectrum Job Number 07P1630 for Three Mile Island Nuclear Station Order 80023053. Spectrum also failed to document any engineering evaluation to justify the lack of testing.

This issue has been identified as Nonconformance 99901119/2008-201-03.

Spectrum Technologies Response to Nonconformance 99901119/2008-201-03

Background:

In all commercial grade dedications, accurate and thorough documentation establishing an item's critical characteristics must be provided. A test plan associated with the subject item must adequately verify the established critical characteristics by performance, analysis or review providing reasonable assurance that the subject item will perform its intended design functions and satisfy critical design attributes.

In those cases where deviation from procedural requirements or standard verification processes is necessary, a basis for the deviation is required to be included in the associated test plan. Additionally, where a deviation is required, other means should be specified to supplement the deviation.

Reason for the nonconformance:

Nonconformance 99901119/2008-201-03 identifies a failure to either perform or provide adequate engineering justification to not perform a Rockwell Hardness test as required by Spectrum's QA program. Specifically, a similarity analysis of a metallic component was performed without performing the required Rockwell hardness

test. This deviation was not adequately explained or alternative testing justified as supplemental to the Rockwell hardness test.

Corrective actions:

1. A review of components dedicated using GP0060, "Qualification by Similarity Analysis Procedure," Revision 3, dated August 20, 2007, Section 5.2.2, "Metallic Material Components," was performed. The intent of this review was to determine if any additional nonconformance conditions existed.

The review found no further cases of similar nonconformance.

Complete: October 1, 2008.

2. A detailed engineering analysis has been performed to support the design adequacy of the subject valve. The subject analysis has been independently reviewed and found acceptable.

Corrective actions to prevent recurrence:

3. It is necessary to take appropriate actions to provide assurance that the programmatic and human performance reasons for this noncompliance are properly addressed. This will be accomplished by both general training to all employees concerning the implementation of the new QA program and specific training to all engineering and technical staff concerning the procedural requirements and basis for documentation.

Scheduled completion date: November 3, 2008

Notice of Nonconformance 99901119/2008-201-04

Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B to 10 CFR Part 50, states in part that, documentary evidence shall be sufficient to identify the specific requirements, such as codes, standards, or specifications, met by the purchased material and equipment."

ATC, Utilities Services Division, Quality Program Manual, Revision 1, dated December 29, 2004, Sections 7.0 "Control of Purchased Material, Equipment and Services," Paragraph 2 states in part that, "The procurement of items and services shall be controlled to assure conformance with specified requirements. Such controls shall provide for evaluation of objective evidence of quality furnished by the supplier.

Spectrum Quality Assurance Procedure QAP-2-002, "Certificates of Conformance and Authorization to Ship," Revision 4, dated May 17, 2005, Section 3.2.2 states in part that "Q1 items being provided to customers other than the utility owner shall be provided through Spectrum Technologies or as otherwise authorized by Spectrum QA. Such items shall be treated as commercial grade until properly re-certified by Spectrum under ATC's Quality Assurance Program meeting the requirements of 10 CFR 50 Appendix B.

The Vice President for Quality Assurance, or his designee, shall perform a detailed review of the certification documentation package provided by the original utility owner to assure that an acceptable Certificate of Conformance from the original supplier of the safety related equipment is provided."

Contrary to the above, as of August 1, 2008:

Spectrum failed to adequately review purchase order documentation from a third-party supplier for Certificate of Conformance COC08P0650, dated February 1, 2008, regarding acceptance of 10 CFR Part 21 requirements for supplying a basic component.

This issue has been identified as Nonconformance 99901119/2008-201-04.

Spectrum Technologies Response to Nonconformance 99901119/2008-201-04

Background:

The control of purchased material must be sufficient to identify the specific requirements, such as codes, standards, or specifications, met by the purchased material. In the case of Spectrum Job 08P0650, Spectrum provided a surplus safety related component (pump) to a customer. The component had been procured from a nuclear utility as safety related and stored at the Woodridge warehouse facility. The nuclear utility had procured the pump from a 10 CFR 50 Appendix B supplier, and subsequently had the pump repaired by the same supplier. Spectrum procured the pump from the Woodridge warehouse facility, reviewed the associated historic procurement documents inspected and provided to the pump to their customer.

Reason for the nonconformance:

A review of documents from the third party supplier indicated that the repair services were provided as safety related with 10 CFR Part 21 indicated as not applicable. This was not identified by Spectrum and no follow up call to the third party repair provider occurred. Therefore, Spectrum did not determine if the repair provider was aware of their 10 CFR Part 21 responsibilities.

Corrective actions to prevent recurrence:

1. Spectrum Technologies shall contact the subject repair provider to establish their understanding of the 10 CFR Part 21 responsibilities associated with the subject pump.

To be complete by 10/17/2008

Notice of Nonconformance 99901119/2008-201-05

Criterion VII, "Control of Purchased Material, Equipment, and Services" of Appendix B to 10 CFR Part 50 states, in part that, "Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents."

Spectrum Quality Assurance Procedure QAP-7-001, "Control of Purchased Material, Equipment and Services," Revision 6, dated September 12, 2006, Section 4.2.2.2, states that, "The Purchase Order shall require that all items be 'Drop Shipped' directly from the [Original Equipment Manufacturer] to Spectrum, and shall state that all items shall be new and not refurbished and that no substitutions are permitted. The Purchase order shall also clearly state that traceability to the O.E.M. is required."

Contrary to the above, as of August 1, 2008: Spectrum failed to provide traceability to the Original Equipment Manufacturer in Job Number 08P1630 for a commercially-dedicated Barton 288A/224 pressure switch, purchased from The Park Company, and provided to the Fermi Nuclear Generating Station for Detroit Edison Company Purchase Order 4700114545, on April 15, 2008.

This issue has been identified as Nonconformance 99901119/2008-201-05.

Spectrum Technologies Response to Nonconformance 99901119/2008-201-04

Background:

The requirements as specified in Spectrum's QAP -7-001 at the time of the inspection required that a Spectrum Purchase Order to state that traceability to the O.E.M. is required. The requirement to demonstrate traceability to the O.E.M. to is highly desirable and should be provided. Due to the age of many of the operating nuclear facilities and the changes in the original manufacturers, an increasing number of commercial grade items are no longer available from the O.E.M. or authorized distributors. Therefore, this requirement can not always be met by a commercial grade item supplier. This has developed the need for new surplus markets, reverse engineering of items and repair and refurbishment programs. These recently developed sources for commercial grade items have made it increasingly difficult for a dedicating organization to determine that an item is traceable to the O.E.M. In those cases were it is not possible to provide absolute traceability other steps need to be taken to provide reasonable assurance that the component was manufactured by or in the case of reverse engineering is identical to the O.E.M. item.

Reason for the nonconformance:

Spectrum's QAP-7-001 requires that traceability to the O.E.M. is established and requires that this traceability be established by drop shipment from the O.E.M. or certification from an O.E.M. authorized distributor. The Barton 288A/224 pressure switch commercially dedicated under Job Number 08P1630 was procured from a new surplus provider and did not meet the requirements of QAP-7-001.

Corrective actions:

1. A more detailed engineering analysis has been performed to document the traceability of the subject Pressure Switch to the O.E.M. The analysis was able to provide reasonable assurance based upon visual inspections, testing, purchase order traceability and interviews with individuals associated with the subject item, that the item was manufactured by the O.E.M.

Completed October 1, 2008

Corrective actions to prevent recurrence:

The requirement to provide traceability to the O.E.M. or O.E.M. design, in the case of reverse engineering, is important to establishing the acceptability of a commercial grade item. However, as stated above a direct link to an O.E.M may not be possible. Therefore, alternate means shall be employed in a controlled programmatic fashion that will provide reasonable assurance that an item was manufactured by the designated O.E.M. These alternate means are incorporated into Spectrum's new QA program. Training will be conducted for all employees concerning the implementation of the new QA program. Specific training to all engineering and technical staff, concerning the new requirements for O.E.M. traceability determination, will be conducted prior to the implementation of the program.

Scheduled completion date: November 3, 2008

Notice of Nonconformance 99901119/2008-201-06

Criterion XVIII, Audits, of Appendix B to 10 CFR Part 50, states in part that, "A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program."

ATC, Utilities Services Division, Quality Program Manual, Revision 1, dated December 29, 2004, Section 18.2.g., states that, "External audits of Spectrum Technologies Division of ATC suppliers of items and services, shall be performed at prescribed frequencies, when said suppliers are required to have a documented Quality Assurance Program which complies with the requirements of 10 CFR 50 Appendix B."

Spectrum Quality Assurance Procedure QAP 18-001 "Audits," Revision 5, dated September 12, 2006, Section 3.2.1, states in part that, "Audits of suppliers of items and services that are required to have documented Quality Assurance programs in accordance with 10 CFR 50 Appendix B shall be audited as specified in Section 18.0 of the Quality Assurance Manual."

Contrary to the above, as of August 1, 2008: The last audit of the ATC Woodridge warehouse facility that Spectrum conducted August 23-24, 2005, did not verify compliance with all aspects of the ATC Woodridge documented quality assurance program. Appendix B to 10 CFR Part 50 criteria not addressed in the audit included: 1) quality assurance program; 2) instructions, procedures, and drawings; 3) identification and control of materials, parts, and components; 4) control of measuring and test equipment; and 5) audits.

This issue has been identified as Nonconformance 99901119/2008-201-06.

Spectrum Technologies Response to Nonconformance 99901119/2008-201-06

Background:

Spectrum's performance of an audit at the ATC Woodridge warehouse facility, August 23 – 24, 2005 was limited in scope, and did not adequately encompass all documented aspects of the Woodridge facilities 10 CFR Part 50 Appendix B program. A subsequent audit conducted October 24 – 25 2006 was similar in nature and therefore, also deficient. The Woodridge warehouse facility is a storage and handling facility, performing no maintenance or testing. The facility houses material purchased by ATC from utility new surplus. The material is stored in a controlled environment (ANSI N45.2.2 Level B and limited Level A storage).

Reason for the nonconformance:

Nonconformance 99901119/2008-201-06 identifies a failure by Spectrum to perform an adequate audit of the ATC Woodridge facility. The subject audit did not adequately address: Criterion 1) Quality Assurance Program; Criterion 5) Instructions, Procedures, and Drawings; Criterion 8) Identification and Control of Materials, Parts, and Components; Criterion 12) Control of Measuring and Test Equipment; and Criterion 18) Audits.

The audits limited focus was for the storage and handling of material, although encompassing the majority of the Woodridge facilities activities is not acceptable. An audit all of facilities safety related activities shall be conducted prior to years end.

Corrective actions:

1. A full scope audit has been scheduled for the Woodridge IL warehouse facility. This audit will verify compliance with all aspects of the ATC Woodridge documented 10 CFR Appendix B quality assurance program.

To be Complete December 15, 2008