CURTISS WRIGHT
Flow Control Company
ENERTECH

Enertech
2950 Birch Street • Brea, CA 92821
Phone: 714.528.2301 • Fax: 714.528.0128
www.enertechnuclear.com

November 30, 2012

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Reply to Notice of Nonconformance(s); Docket Number 999013777; Report number 2012-201.

The purpose of this document is to respond to the above referenced Notice of Nonconformance resulting from the NRC Routine Inspection performed August 27-28, 2012 and September 17-20, 2012 for activities performed or controlled by Enertech. At the time of the NRC exit meeting the nonconformances identified during the inspection were understood by the Enertech Management Team and the implemented and anticipated actions had been discussed. Below I have detailed our actions in addressing the identified Nonconformances.

NON: 99901377/2012-201-02 Identified Concern: Enertech failed to review for suitability of application materials that were essential to the safety-related functions of structures, systems, and components. Specifically, Enertech did not perform the following 3 items:

(a) Adequately dedicate ERV-Z 8-inch nozzle check valve test activities conducted at USU (Utah State University). The commercial grade survey performed by Enertech at USU did not verify the calibration quality of the instruments used during the American Society of Mechanical Engineers (ASME) QME-1 functional flow tests to identify and record safety-related test data. These instruments included fluke meters, Rosemount pressure transmitters, a magnetic flow meter, a digital thermometer, and the Avery (water) weigh tank, which were commercially calibrated and accepted by USU and Enertech without verification of the calibration suppliers.

(b) Employ suitable dedication methods to verify that safety-related non-pressure boundary ERV-Z 8-inch nozzle check valve parts purchased as commercial grade items (CGI) met the appropriate material specifications (chemical and mechanical properties) that the associated CGI Dedication Procedure document identified as critical characteristics. The diffuser, large retaining ring, and small retaining ring were purchased from commercial suppliers who had not received a commercial grade survey. Enertech accepted the material certification report for the chemical and mechanical properties through positive material identification (PMI) using an x-ray fluorescence alloy analyzer for only a limited sample of the chemical elements. The CGI Evaluation MA22004 (for the diffuser) and CGI Evaluation MA21723, (for the large and small retaining rings) did not include a documented technical justification necessary to address the acceptance of all identified material specification chemical and mechanical properties that were identified on the material certification report.

(c) Perform an appropriate CGI technical evaluation as part of CGD for the diffuser, the large retaining rings, and the small retaining rings. The CGI technical evaluation did not include a documented justification for the sampling plans that were being implemented for acceptance. Enertech received the sampled items from suppliers that had not been through a review or commercial grade survey to verify a traceability process for lot/batch heat number control. The CGI Evaluation MA22004 (for the diffuser) and CGI Evaluation MA21723 (for the large and small retaining rings) that were performed as part of the dedication did not include a documented basis for the sample testing population of the items received from commercial suppliers for which lot/batch homogeneity had not been verified.

Cause:

(a) Enertech issued Corrective Action Request # CAR 2034 to address this issue. While Enertech has made every effort to comply with Industry and regulatory requirements regarding Dedication activities, to establish reasonable assurances that the selected critical characteristics and the chosen acceptance methods are suitable to conclude the safety function of Testing Services are adequately controlled, our Technical Evaluation to support the Dedication of Testing Services does not adequately document establishing reasonable assurance the calibration quality characteristic.

(b)&(c) Enertech issued Corrective Action Request # CAR 2032 to address these issues. While it was demonstrated during NRC visit that Enertech used appropriate sampling plans as part of dedication activities and verification of material, the engineering technical justification for material verification and sampling were documented in CGI Evaluation and EOP 3140, it did not meet the NRC expectations, due to its generic nature.

Remedial/Corrective Action:

(a). Revise the Technical Evaluation for Testing Services to document how reasonable assurance is established. Further regarding the subject current testing, Enertech confirmed satisfactory accuracy of the M&TE used during USU testing by Enertech post-test accuracy verification. Enertech immediately halted any further Testing Services dedication activities until this issue is resolved and closed.

(b)&(c) Document the technical justification for acceptance method of material and sampling methods in CGI evaluation MA24945 (Diffuser) and MA24946 (Retaining Ring), in accordance with identified critical characteristics, including the requirements for Lot homogeneity for each sampling plan. Revise Diffuser CGI Dedication Plan (CGI D8740S) for Lot# 40316 to reflect a different Engineering Evaluation supports the dedication.

Preventative Action:

(a) Revised EOP 8185 to require the Enertech Survey Team when evaluating a commercial grade supplier using calibration controls as an EPRI Method 2 acceptance credit to determine the supplier has appropriate controls when subcontracting calibration. Those controls include either performing on-site commercial surveys of that calibration services subsupplier, or the supplier is using recognized calibration subsupplier holding valid Industry Accreditation from entities, such as A2LA, ACLASS, NAVLAP to ensure calibration quality or in-house

calibration procedures are implemented that is surveyed and accepted by Enertech Survey Team.

(b)&(c) Revise EOP 3140 "Dedication Controls", to state the requirements for satisfactory documentation of technical justification for acceptance and sampling methods. Revise Diffuser CGI Dedication Plan (CGI D8740S) to reflect the Engineering Evaluation supporting the dedication. Provide training to affected personnel.

Proposed completion date: 12/31/2012

NON 99901377/2012-201-03 Identified Concern: Enertech failed to establish a test program to ensure that it had identified and performed all testing necessary to demonstrate that the ERV-Z 8-inch nozzle check valve will perform satisfactorily in service. Specifically, Enertech's test program did not identify and perform qualification testing of the valve to demonstrate operability under all QME-1-2007 specified operating and design basis conditions.

Cause:
Enertech issued Corrective Action Request # CAR 2033 to address this issue. It should be noted that while four of the five QME-1 tests were satisfactorily completed in accordance with the customer approved Test Plan, technical details of the remaining QME-1 test were under discussion during contractual negotiations with Westinghouse at the time of the survey, this was in the process of being resolved.

Corrective Action:
Following receipt of a new customer PO on 10/4/12, revise procedure MA22989 and Qualification Test Plan to include high pressure impact test of the valve. This revision of the Qualification Test Plan will satisfy QME-1 test in operating and design basis conditions. The high pressure impact testing per the revised procedure was successfully completed on November 14, 2012.

Preventative Action:
Provide training to Qualification and Project engineers to ensure written procedure satisfies all current customer requirements and QME-1.

Proposed completion date: 12/31/2012

NON 99901377/2012-201-04 Identified Concern: Enertech failed to establish adequate controls to ensure that the gauges used in the qualification testing of a safety-related ASME Section III Class 1 "N-Stamp" valve were properly controlled to display accurate calibration labels. Specifically, Enertech failed to ensure that the gauges used in ASME Boiler and Pressure Vessel Code testing was calibrated before and after testing. Furthermore, Enertech failed to ensure that measuring and test equipment had permanent markings to identify the equipment.

Cause(s):
Enertech issued Corrective Action Request # CAR 2027 to address this issue. (a)The Calibration Technician failed to recognize the gauge was being used for a Code test, whereby not replacing the label for pretest. However the gauge used for the test activity had been calibrated and determined accurate prior to and posttest per the ASME Code requirements; and (b) The Calibration Technicians had not properly implemented the Calibration Procedure regarding "permanent marking".

Remedial/Corrective Action:
Verified every piece of equipment in the M&TE inventory to confirm the item is permanently marked, if not, Calibration technician to permanently mark per the procedure. During this process determine if each M&TE had a label with accurate information.

Preventative Action:
Provide additional training to the Calibration Technician to know what to look for when determining if the test instrument will be used for an ASME Code test.

Proposed Completion Date: Completed

NON 99901377/2012-201-05 Identified Concern: Enertech failed to promptly identify and correct conditions adverse to quality and failed to adequately implement corrective actions. Specifically, Enertech failed to initiate a CAR related to the potential arcing and short-circuiting of actuator circuit boards, although two Enertech evaluations addressed this issue under 10 CFR Part 21, "Reporting of Defects and Noncompliance:"

- NRC 11-001, "Potential 10 CFR 21 Reportable Item, Actuator Circuit Boards," dated August 1, 2011
- NRC 11-002, "Potential 10 CFR 21 Reportable Item, Actuator Circuit Boards," dated September 20, 2011

Consequently, Enertech did not complete the corrective actions described in these evaluations, including sending letters to customers and making replacement parts kit and installation instructions available.

Cause:
Enertech issued Corrective Action Request # CAR 2029 to address this issue. Due to lack of procedural controls when a Part 21 Evaluation includes additional actions.

Remedial/ Corrective Actions:
(a) Letters' were sent to effected customers, and (b) replacement parts kits with installation instructions have been prepared.

Preventative Action:
Procedure 8200 was revised to Revision R to require the issuance of a CAR to track actions identified within a Part 21 Evaluation.

Proposed Completion Date: Completed

NON 99901377/2012-201-06 Identified Concern: Enertech failed to establish adequate controls to ensure that it had stored quality records in a controlled area to prevent access by unauthorized personnel and to protect documents against loss. Specifically, Enertech stored calibration quality records in an unlocked filing cabinet that was located in a room that was not access controlled.

Cause:
The Calibration Technician had not implemented the procedure to dual record store the calibration records. Confirmed only the calibration records had been stored separately from other QA Records.

Remedial/Corrective Action:
Upon identification of the concern, Enertech immediately moved all QA Calibration Records to a secure location in a fire rated secure filing cabinet.

Preventative Action:
On September 25, 2012 a locking fire rated file cabinet was placed in the calibration lab area to safeguard the QA Calibration records. Calibration Records have been move into the fire rated file cabinet.

Proposed Completion Date: Completed.

Enertech processed the above nonconformances in accordance with the Enertech Quality Assurance Program. Classroom training was provided and documented as required to the affected individuals for all (5) five notice of nonconformance issues to Enertech procedures and QA Program.

Objective evidence documents are herein attached as supporting the actions stated in this response. The attachments are:
For Public record:
Attachment -1: Enertech EOP 8185 Revision I dated 11/15/12 cover page
Attachment -2: Enertech MA24945 Revision A dated 11/16/12 cover page
Attachment -3: Enertech MA21723 Revision C dated 11/29/12 cover page
Attachment -4: Confirmation of M&TE labeling and marking verified dated 10/30/12
[redacted]5: Enertech EOP 8200 Revision R dated 9/20/12 cover page
Attachment -6: Training records for completed issues

[redacted]

If you have any questions regarding this issue, please contact me at your convenience.

Respectfully submitted,

Stanley Miller
General Manager

CURTISS WRIGHT
Flow Control Company
ENERTECH

ENERTECH Operating Procedure

EOP	8185	REV	I

Title PROCEDURE FOR COMMERCIAL GRADE SURVEY

Prepared By *John DeKleine* Date May 26, 2005

Approved By *Herbert Ellsworth* Date May 27, 2005

QA Approval *John DeKleine* Date May 27, 2005

RECORD OF REVISIONS

REV	DESCRIPTION	BY	DATE	APP'D	DATE	QA	DATE
Ø	Please refer to original cover sheet in archives for signatures and record of revisions.						
A							
B							
C							
D							
E							
F							
G							
H							
I	Added new par: 7.3.1.7.5. Revised par.: 7.4.3		11/15/12		11/15/12		11/15/12

[redacted]

CURTISS WRIGHT Flow Control Company
ENERTECH
2950 Birch Street, Brea, CA 92821 U.S.A.
Phone: 714.528.2301 Fax: 714.528.0128

CUSTOMER	REV.	DRAWING NUMBER	
STANDARD	A	MA24945	Page 1 of 15

CGI EVALUATION - DIFFUSER, PASSIVE N. O. NOZZLE CHECK VALVE

CGI EVALUATION FOR

DIFFUSER, PASSIVE N.O. NOZZLE CHECK VALVE

[redacted]

Ira Jay Silverman, PE — *20 September 2012*
Prepared by: — Date

Avi Shelcoviz, PE — *9/20/12*
Checked by: — Date

Ararat Torosyan, PE — *9-20-12*
Approved by: — Date

ORIGINAL

CURTISS WRIGHT Flow Control Company ENERTECH
2950 Birch Street, Brea, CA 92821 U.S.A.
Phone: 714.528.2301 Fax: 714.528.0128

CUSTOMER	REV.	DRAWING NUMBER	
STANDARD	C	MA21723	Page 1 of 6

CGI EVALUATION - SPRING CLIPS / RETAINING RINGS

CGI EVALUATION

SPRING CLIPS / RETAINING RINGS

[redacted]

Ira Jay Silverman, PE — Prepared by: — *23 October 2006* — Date

Rich Papini — Checked by: — *26 Oct 06* — Date

Avi Shelcoviz, PE — Approved by: — *10/26/06* — Date

Please refer to original title page, maintained in Document Control, for signatures.

ORIGINAL

Gage S/N	Description	Type	Current Location	Gage ID	Frequency
VSW-024	STOP WATCH DIGITAL	STOP WATCH	METROLOGY ROOM	EE-040	12 MONTHS

414 Records Printed

The above is the complete list of Active Enertech M&TE. All listed M&TE have been visually verified for proper "permanent" marking of the I.D. numbers. Proper Calibration Label Information has been visually verified on All listed M&TE, as well.

Emil Paulescu Date: 10/30/2012

Emil Paulescu / Calibration Technician

CURTISS WRIGHT
Flow Control Company
ENERTECH

ENERTECH Operating Procedure

EOP	8200	REV	R

Title Reporting requirements concerning Defects & Noncompliance per 10CFR Part 21.

Prepared By T.M. Cottrill Date 7/19/89

Approved By W.J. O'Brien Date 7/19/89

QA Approval T.M. Cottrill Date 7/21/89

RECORD OF REVISIONS

REV	DESCRIPTION	BY	DATE	APP'D	DATE	QA	DATE
0							
A							
B							
C							
D							
E							
F							
G							
H							
I	Please refer to original cover sheet in archives for signatures and record of revisions.						
J							
K							
L							
M							
N							
O							
P							
Q							
R	Revised par 6.7.4, added 6.8.3		9/20/12		9/20/2012		9/20/12

CURTISS WRIGHT
Flow Control Company
ENERTECH

Brea, California 92821

QUALITY ASSURANCE PROGRAM

TRAINING RECORD

Written by:	Louis Lares	Date:	10/31/2012
Instructor:	Louis Lares	Title:	QC Supervisor
Date/Place/Duration:	10/31/12 , Brea Office, 1/2 Hours		

Name (print or type)	Signature	Department/Title
Louis Lares		QC Supervisor /Class I Calibration Technician
Emil Paulescu		QC / Class I Calibration Technician
Joseph Rosca		ENG / Class II Calibration Technician
Marius Rosca		ENG / Class II Calibration Technician

Lesson Content: (Include document revisions and/or dates, as applicable)

Ref: CAR# 2027 – To provide a clear understanding of QAM Section 12, Fourth Ed., Rev. 19 and, EOP 8120, Rev. Q, pertaining to Calibration Labels & Permanently Identifying all M&TE.

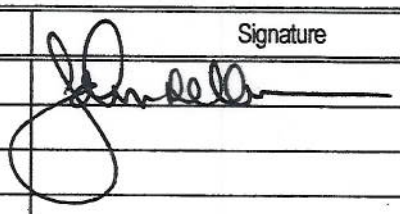
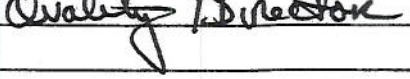
CURTISS WRIGHT
Flow Control Company
ENERTECH

Brea, California 92821

QUALITY ASSURANCE PROGRAM

TRAINING RECORD

Written by:	John DeKleine	Date:	11/15/12
Instructor:	John DeKleine	Title:	Director, QA
Date/Place/Duration:	11/15/12 , Brea Office, 1/2 Hours		

Name (print or type)	Signature	Department/Title
John DeKleine		

Lesson Content: (Include document revisions and/or dates, as applicable)

Enertech Corrective Action CAR# 2029
NRC NON 99901377/2012-201-05
Enertech Procedure EOP 8200 Rev R "reporting Requirements concerning defect and noncompliance per 10CFR Part 21"

CURTISS WRIGHT Flow Control Company ENERTECH

CGI DEDICATION PROCEDURE

Description: [illegible] Diffuser

Production Orde[illegible]

Design Function: Maintain [illegible]t and spring in proper position and orientation for correct operation.
Safety Function: Same as desig[illegible]n.

Functional Mode (NP-6629): ___ Active [illegible] Passive _X_ Not Applicable **Reference CGI Evaluation:** MA22004 - [illegible]re Retaining Valve Parts

Qualifications:

___ Environmentally qualified per _____ _X_ Environmental qualification does not apply.
___ Seismically qualified per _____ Seismic qualification does not apply.
___ Original Qualifications are maintained by compliance to the [illegible] design/drawing requirements.

Eligibility of Commercial Grade item:

X Not subject to design specification requirements that are unique to nucle[illegible]ties.
X Used in applications other than nuclear facilities.
X Purchased on the basis of specifications set forth in the manufacturer's published pr[illegible]escription.

Basis for Selection of Critical Characteristics for Acceptance:
Material: Provides assurance that the item material has not changed such that the design basis or the origin[illegible]fication may become invalid.
Dimensions & Configuration: Provides assurance that the item has not changed as to jeopardize its ability to inte[illegible]h its parent component.
Functions: Provides a reasonable assurance that the item will operate within its design parameters.
Markings: Provide an indication if the item is not the one purchased for the intended application.

The selected Acceptance Method, Sampling Plan and/or Notes apply only when invoked.

Acceptance Method:

1. Special Test and Inspections
2. Commercial Grade Survey
3. Source Inspection

Sampling Plan:

A. 100% (All items)
B1. EOP 3140, Tighten (Table -1)
B2. EOP 3140, Normal (Table -1)
B3. EOP 3140, Reduced (Table
C. One sample per lot (destructive disassembly (Note 1) or CGI Survey)
D. EOP 3140, Normal (Table -2)

Notes:

1. Disassembly to access internal parts is not recommended. Lot homogeneity (EOP 3140) and testing of accessible items provide reasonable assurance [illegible] items materials are correct.
2. Assembly and Functional Test provide reasonable assurance that subcomponents are manufactured correctly and interface dimensions (i.e. connection [illegible]rts) a[illegible]
3. Acceptance of commercial CMTR requires PMI, traceability marking on item and CMTR compliance with material specification.
4. Verification of other categories (i.e. material, dimensions, configuration and workmanship) provides reasonable assurance that the item will perform its f[illegible]
5. Verification of this critical characteristic is requested by Customer; it is not mandated by the referenced CGI Evaluation.

Rev.	ECO No.	Drawn By/Date	Checked By/Date	Approved By/Date
0	INITIAL RELEASE	T. Ruiz 5/4/11	RZ 5/9/11	5/4/11

For previous revision records see Document Control archive.

ORIGINAL

11/16/12
11/16/12

Releas[illegible]facturing
Production or Purchase Order
Num[illegible]5
Initial[illegible] MAY 18 2011

USE-C[illegible]TROLLED
Not Val[illegible]nufacturing

ENERTECH
Curtiss-Wright Flow Control Corporation

REMOVED

MANUAL SHOP TRAVELER

Reference Corrective Action 2029

SHEET 1 OF1

JOB NO. Corrective Action 2029	STOCK NO. E0512C	DESC. AS Servo Board Retrofit Kit	QTY 107

DRAWING NO.	REV	REV	CHANGE DESCRIPTION	ENG	DATE	QA	DATE
						JA	11/20/12
MA24023 107 Copies	0		Marked for Information				
MB24022 107 Copies	A						

Should be done

OP #	DEPT	DESCRIPTION OF OPERATION	COMPLETE
10	601	Warehouse issue the following items:	11/21/12
		C6834C, QTY 428, Lot 41220, Location 8A2, PO # 204829	
		A1311C, QTY 426, Lot 41221, Location 8A2, PO # 204829	
		A1311A, QTY 2, Lot 51233, Location PI-1T, PO # 206648	
		E0514C, QTY 428, Lot 41455, Location 6A, PO # 204830	
		E0513C, QTY 428, Lot 41222, Location 8A, PO # 204829	
20	202	Verify previous OP	EP 11/26/12
30	700	Planner create labels – Kit P/N MA 23 3 Include copy of MA24023, Rev. 0 MB24022, Rev. A in each kit.	TMT 11/27/12
40	601	Warehouse put into kit	11/26/12
50	202	Verify Previous OP. Give pa warehouse	EP 11/26/12
60	601	Assign location in warehou nd record location: 10D4	11/27/12
70	700	Planner, Adjust inventory omponents, create lot number, put assemblies in inventory, close shop traveler	TMT 11/27/12
		Lot # 51841, 10D4, QTY 107	

NUC. PROD. CONTROL TMT DATE 11-27-12

S.A. APPROVAL