Part 21 (PAR) Event # 47498

Rep Org: CURTISS WRIGHT FLOW CONTROL CO.		**Notification Date / Time:** 12/05/2011 14:55 (EST)	
Supplier: CURTISS WRIGHT FLOW CONTROL CO.		**Event Date / Time:** 12/05/2011 (EST)	
		Last Modification: 12/05/2011	
Region: 1		**Docket #:**	
City: DANBURY		**Agreement State:** No	
County:		**License #:**	
State: CT			
NRC Notified by: MICHAEL WEINSTEIN		**Notifications:** CHRISTOPHER CAHILL	R1DO
HQ Ops Officer: STEVE SANDIN		RICHARD SKOKOWSKI	R3DO
Emergency Class: NON EMERGENCY		NRR PART21 via email	
10 CFR Section:			
21.21 UNSPECIFIED PARAGRAPH			

PART 21 INVOLVING DEFECTIVE SPRING CLIPS USED AS SEISMIC RESTRAINTS ON TWO SCIENTIFIC MODULES

The following information was received via fax:

"The purpose of this letter is to notify you of a defect in spring clips that form part of the seismic restraint for Scientech CON2000-701 and RTD2100-7403 modules. Details of the defect are provided below and in the attached Technical Bulletin Volume 38, CON2000 and RTD2100 Spring Clips, dated December 2011.

"The written report shall include, but need not be limited to, the following information, to the extent known:

(i) Name and address of the individual or individuals informing the Commission.

Michael Weinstein
Director of Quality Operations
Scientech, a business of Curtiss-Wright Flow Control Corporation
44 Shelter Rock Road
Danbury, CT 06810

Scott Robuck
General Manager
Scientech, a business unit of Curtiss-Wright Flow Control Corporation
200 S. Woodruff Avenue
Idaho Falls, ID 83401

JE19
NRR

Part 21 (PAR) Event # 47498

(ii) Identification of the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

PID controller, manufactured by Scientech, Model CON2000-701, Part No. NUS-A056PA
RTD converter, manufactured by Scientech, Model RTD2100-7403, Part No. NUS-A121PA

(iii) Identification of the firm supplying the basic component which fails to comply or contains a defect.

Scientech, a business unit of Curtiss-Wright Flow control Corporation
200 S. Woodruff Avenue
Idaho Falls, ID 83401

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

The CON2000-701 is replacement for the obsolete Bailey Meter Company 701 PID controller. It is a panel mounted module that is retained in the panel during seismic events by a spring clip on the top of the modules (part number NUS-P089DB-13) that engages a detent in the panel. The module can be pulled out about one inch out of the rack before the spring clip prevents further movement; full removal requires pressure on the spring clip to disengage the detent.

The module was seismically tested as documented in Qualification Report NUS-A056QA Rev 2. During the CON2000 test, a minor anomaly occurred and was accepted by Scientech as not affecting the qualification results. Recently a client questioned Scientech's acceptance of the anomaly and requested a retest. Scientech agreed to retest the module; the RRS used is attached. During the retest, the spring clip failed to adequately restrain the module.

The balance of the replacements for the Bailey 7000 series - the NUSI 2000 series - are cabinet mounted modules. When they are reconfigured for shelf or panel mounting they become part of the NUSI 2100 series, and the seismically qualified units use the same spring clip. The RTD2100-7403 is the only safety related panel mounted module sold as of December 2011 with the deficient spring clip.

Investigation revealed that the original clip was made of 0.025" thick spring steel. After the seismic qualification test was performed, Revision 4 to NUS-F089DB-13 altered the characteristics of the retaining clip, reducing the force required to disengage the detent. The metal was changed to SS301 stainless steel and the thickness reduced to 0.015" thick. Scientech's design change process required an evaluation of the impact of the change; the evaluation was complet4ed, but did not address the impact on seismic qualification adequately.

These controllers could be mounted in the in the main control room control panels. The failure of the seismic clip could result in the controllers coming out of the panels, impacting other safety related equipment or personnel, and failing to properly control their actuated devices during a seismic event.

(v) The date on which the information of such defect or failure to comply was obtained.

Submitted for evaluation 11/30/11; evaluation completed 12/2/11.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

PLANT	CON2000-701	RTD2100-7403
Clinton	4	0

Part 21 (PAR) Event # 47498

Davis Besse	8	0
Monticello	2	0
Perry	4	0
Susquehanna	20	7
TOTALS	38	7

(vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

1. All five plants were notified and provided with a technical bulletin addressing the problem and the proposed solution.
2. Scientech is expedition procurement of the correct spring clips and will supply them to all affected plants. They can be readily changed out on site.
3. Scientech had previously strengthened its design review process to specifically remind reviewers to evaluate the impact on and need for additional qualifications testing.
4. Scientech will review this event with all engineering staff and emphasize the need for correct reviews.

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

See attached Technical Bulletin. (provided separately)

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

Not applicable.

"Should you have any questions regarding this matter, please contact Robert Queenan, Operations Manager, Scientech/NUS Instruments, at (208) 524-9311."

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CURTISS WRIGHT Flow Control Company
SCIENTECH

TELECOPY COVER SHEET

To: NRC Operations Center

Phone: (301) 816-5100

Fax: (301) 816-5151

From: Michael Weinstein, Scientech
Director of Quality Operations

Phone: (203)-448-3346/(860)-514-9203(cell)

Fax: (203)-448-3311

Date: December 5, 2011

Pages including this cover page: 6

If any problems occur during transmission, please contact Engineered Products at the number listed above or contact Suzana at 203/448-3341

Scientech
44 Shelter Rock Road • Danbury, CT 06810
Phone: 203.448.3310 • Fax: 203.448.3311
http://scientech.cwfc.com

CURTISS WRIGHT Flow Control Company
SCIENTECH

December 5, 2011

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Subject: 10 CFR Part 21 Report Notification, CON2000 and RTD2100 Spring Clips

Dear Sir or Madam:

The purpose of this letter is to notify you of a defect in spring clips that form part of the seismic restraint for the Scientech CON2000-701 and RTD2100-7403 modules. Details of the defect are provided below and in the attached Technical Bulletin Volume 38, CON2000 and RTD2100 Spring Clips, dated December 2011.

The written report required shall include, but need not be limited to, the following information, to the extent known:

(i) Name and address of the individual or individuals informing the Commission.

Michael Weinstein
Director of Quality Operations
Scientech, a business unit of Curtiss-Wright Flow Control Corporation
44 Shelter Rock Road
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Scott Robuck
General Manager
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(ii) Identification of the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

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RTD converter, manufactured by Scientech, Model RTD2100-7403, Part No. NUS-A121PA

(iii) Identification of the firm supplying the basic component which fails to comply or contains a defect.

Scientech, a business unit of Curtiss-Wright Flow Control Corporation
200 S Woodruff Avenue
Idaho Falls, ID 83401

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

The CON2000-701 is replacement for the obsolete Bailey Meter Company 701 PID controller. It is a panel mounted module that is retained in the panel during seismic events by a spring clip on the top of the modules (part number NUS-F089DB-13) that engages a detent in the panel. The module can be pulled about one inch out of the rack before the spring clip prevents further movement; full removal requires pressure on the spring clip to disengage the detent.

The module was seismically tested as documented in Qualification Report NUS-A056QA Rev 2. During the CON2000 test, a minor anomaly occurred and was accepted by Scientech as not affecting the qualification results. Recently a client questioned Scientech's acceptance of the anomaly and requested a retest. Scientech agreed to retest the module; the RRS used is attached. During the retest, the spring clip failed to adequately restrain the module.

The balance of the replacements for the Bailey 7000 series – the NUSI 2000 series - are cabinet mounted modules. When they are reconfigured for shelf or panel mounting they become part of the NUSI 2100 series, and the seismically qualified units use the same spring clip. The RTD2100-7403 is the only safety related panel mounted module sold as of December 2011 with the deficient spring clip.

Investigation revealed that the original clip was made of 0.025" thick spring steel. After the seismic qualification test was performed, Revision 4 to NUS-F089DB-13 altered the characteristics of the retaining clip, reducing the force required to disengage the detent. The metal was changed to SS301 stainless steel and the thickness reduced to 0.015" thick. Scientech's design change process required an evaluation of the impact of the change; the evaluation was completed, but did not address the impact on seismic qualification adequately.

These controllers could be mounted in the main control room control panels. The failure of the seismic clip could result in the controllers coming out of the panels, impacting other safety related equipment or personnel, and failing to properly control their actuated devices during a seismic event.

(v) The date on which the information of such defect or failure to comply was obtained.

Submitted for evaluation 11/30/11; evaluation completed 12/2/11.

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PLANT	CON2000-701	RTD2100-7403
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See attached Technical Bulletin.

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Not applicable.

Should you have any questions regarding this matter, please contact Robert Queenan, Operations Manager, Scientech/NUS Instruments, at (208) 524-9311.

Sincerely,

Michael B. Weinstein
Director of Quality Operations
Scientech, a business unit of Curtiss-Wright Flow Control Corporation
(203) 448-3346
(860) 514-9203 (cell)

Attachments:

1. NUS Instruments Technical Bulletin Volume 38, CON2000 and RTD2100 Spring Clips, Dated December 2011.

Cc: Scott Robuck
Robert Queenan
Vince Chermak
QA File

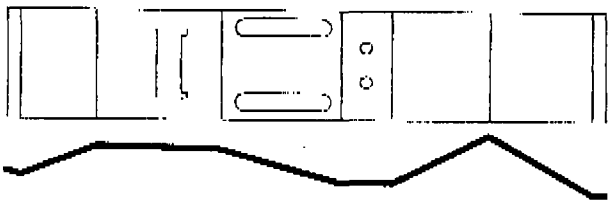
NUS Instruments

TECHNICAL BULLETIN

Issue Date:	December 2011
From:	Scientech, a Curtiss Wright Flow Control company
Technical Point Of Contact:	Rick Street 200 S. Woodruff Avenue Idaho Falls, ID 83401 (208) 524-9249
Subject:	CON2000 & RTD2100 Spring Clips

Purpose

This Technical Bulletin documents a DEFECT in basic components. Certain spring clips that form part of the seismic restraint for the Scientech CON2000-701 and RTD2000-7403 modules are deficient, and may not retain the modules in the control panels during a seismic event.



Description of Defect

The CON2000-701 is replacement for the obsolete Bailey Meter Company 701 PID controller. It is a panel mounted module that is retained in the panel during seismic events by a spring clip on the top of the modules (part number NUS-F089DB-13) that engages a detent in the panel. The module can be pulled about one inch out of the rack before the spring clip prevents further movement; full removal requires pressure on the spring clip to disengage the detent.

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These controllers could be mounted in the main control room control panels. The failure of the seismic clip could result in the controllers coming out of the panels, impacting other safety related equipment or personnel, and failing to properly control their actuated devices during a seismic event.

NUS Instruments

TECHNICAL BULLETIN

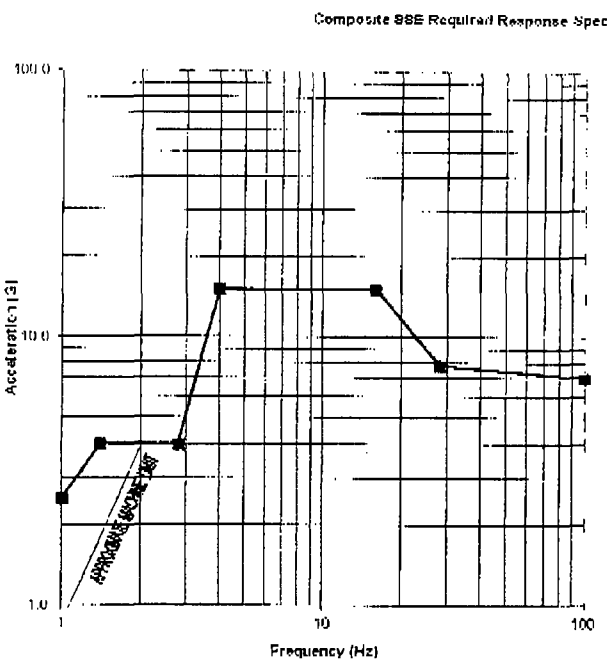
Immediate Actions

Scientech documented the deviation in Non-Conformance Report 11N-150 on November 30, 2011. The evaluation of the NCR revealed the need for a 10CFR21 evaluation, which assigned tracking number 21-11-18. On December 2, 2011 the evaluation was completed; it showed that the deviation was a defect, reportable under 10CFR21. Scientech notified the NRC and all purchasers of safety related CON2000-701 and RTD2100-7403 modules. Scientech initiated an expedited procurement of the original design spring clip.

Scientech will provide 0.025" spring steel clips as used in the original qualification test with installation instructions to all affected plants. The spring clips are easily replaced in the field.

Follow Up Actions

Scientech had previously strengthened its design review process to specifically remind reviewers to evaluate the impact on and need for additional qualification testing. Scientech will review this event with all engineering staff and emphasize the need for correct reviews.



Note: Technical Bulletins are for information only and are not controlled under the NUSI QA program. Any actions to be taken by NUSI in response to an issue shall be tracked through implementation in QA-controlled documents independently of the Technical Bulletin.