

Part 21 (PAR)

Event # 51915

Rep Org: ELECTROSWITCH		Notification Date / Time: 05/10/2016 15:59 (EDT)	
Supplier: ELECTROSWITCH		Event Date / Time: 05/10/2016 (EDT)	
Last Modification: 05/11/2016			
Region: 1		Docket #: 99900833	
City: WEYMOUTH		Agreement State: Yes	
County:		License #:	
State: MA			
NRC Notified by: LARRY FRIEDMAN		Notifications: ART BURRITT	R1DO
HQ Ops Officer: BETHANY CECERE		JAMIE HEISSERER	R2DO
Emergency Class: NON EMERGENCY		ERIC DUNCAN	R3DO
10 CFR Section:		VIVIAN CAMPBELL	R4DO
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE		PART 21/50.55 REACTORS	EMAIL

PART 21 REPORTING OF DEFECTS AND NONCOMPLIANCE

The following is a synopsis of information received via fax:

"Various Electroschwitch products - Series 24 Instrument & Control (Part #24XX, 24XXX, 243XX, 74XXX), Series 24 LOR (part #78XX), Series 24 LOR/ER (part #78XX), Series 24 CSR (part #88XX), Series 24 LSR (part #92XX), Series 31 Instrument & Control (part #31XXX, 65XXX, 75XXX), Series 31 TR/LSR (part #93XX), Series 20 Cam (part #20KB, 20KD, 20LB, 20LD, 20MB, 20MD, 20MF, 20MG, 20PF, 20PG, 20PH, 20PJ, 20PL, 20PY), Series 20 Module (part #10XXX, 17XXX, 18XXX, 19XXX, 29XXX, 30XXX, 32XXX, 38XXX, 40XXX, 60XXX, 61XXX, 62XXX, 63XXX) [have a potential deviation (departure from the technical requirements included in the procure document)]

"It was determined on May 10, 2016 that Electroschwitch does not have the capability to perform the evaluation to determine if a defect, which could create a substantial safety hazard, exists.

"Any Electroschwitch product that has a part number listed above and was sold as a Safety-Related Class 1E product [may contain the deviation].

The two nonconformance issues are:

"Initial Product Qualification Tests for Dielectric Withstanding Voltage, Insulation Resistance and Contact Resistance as defined in Electroschwitch's ESC-STD-1000 Rev. 3 dated 9/3/1984 General Specifications for Rotary Switches and Auxiliary Relays for Utility Applications including Class 1E Equipment for Nuclear Power Generating Stations was found to be in contradiction to IEEE C37.90-1978 Relays and Relay Systems Associated with Electric Power Apparatus.

IE19
NRR

"Electroswitch did not procure materials, parts, equipment and/or services from an Appendix B supplier nor were applicable Commercial Grade Surveys, Source Inspections and Material Analyses performed for the following materials:

Precious metal blade overlay material
Red metal blade material
Precious metal overlay thickness of switch blade material
Molding compound of switch insulators (terminal decks and barriers)
Carbon steel for securing rods
Solenoids
Relays
Services (test labs) pertaining to product qualification

Electroswitch is attempting to determine which NRC licensees are potentially affected.

"The following personnel may be contacted regarding this notification:

Larry Friedman
Quality Assurance Manager
781-607-3309

Ed Reszenski
Engineering Manager
781-607-3341"

* * * UPDATE FROM LARRY FRIEDMAN TO DONALD NORWOOD AT 1656 EDT ON 5/11/2016 * * *

The following information was received via fax:

Below is the list of utilities (and plants where specified) which were notified of Electroswitch's decision to end the Appendix B Quality Assurance Program:

Ameren Energy

Dominion Energy

Duke Energy

Energy Northwest

Entergy Nuclear (Waterford 3 Nuclear)

Entergy Nuclear (Pilgrim Power Plant)

Entergy Nuclear (Indian Point Energy)

Xcel Energy (Monticello Nuclear)

MPR Associates for FPL

Nebraska Public Power (Cooper Nuclear)

Nextera (Point Beach Nuclear)

Xcel Energy (Prairie Island Gen)

Southern Power (Hatch)

Southern Power (Vogtle)

TVA

TVA (Watts Bar Nuclear)

Wolf Creek Nuclear

Notified R1DO (Burritt), R2DO (Heisserer), R3DO (Duncan) and R4 DO (Campbell) and via E-mail Part 21/50.55 Reactors Group.



180 King Avenue
Weymouth, MA 02188
Phone: 781-335-5200
Fax: 781-331-3798

Date: May 11, 2016

Attention: **NRC Operations Center**

of Pages: 7 (including cover)

Company: U. S. Nuclear Regulatory Commission

Fax #: 301-816-5151

From: Larry Friedman
Quality Assurance Manager

Phone: 781-607-3309

Attached is the revised 10CFR Part 21 Reporting of Defects and Noncompliance, which was a result of the NRC Vendor Inspection of Electroswitch Corporation Docket #99900833.

The revision includes the list of utilities who were notified of Electroswitch's decision to end the Appendix B Quality Assurance Program.

Reference: Event #51915

**ELECTROSWITCH • SWITCHES & RELAYS**

UNIT OF ELECTRO SWITCH CORP.

180 King Avenue • Weymouth, MA 02188 • Phone 781-335-5200 • Fax 781-335-4253

May 10, 2016

Revised May 11, 2016

U. S. Nuclear Regulatory Commission

NRC Operations Center

Facsimile # 301-816-5151

Subject: 10 CFR Part21 Reporting of Defects and Noncompliance -

Reference: Vendor Inspection of Electroswitch Corporation Docket #99900833

Event #51915

To whom it may concern:

The enclosed report addresses a reportable notification on various Electroswitch products.

A copy of the report will be mailed to our affected nuclear customers.

Please sign below, acknowledging receipt of this report, and return a copy to the attention of
Larry Friedman, Quality Assurance Manager, at the above address or fax to 781-335-4253 within
10 working days after receipt.

Sincerely,

ELECTROSWITCH

Larry Friedman

Quality Assurance Manager

Please let us know if ANY of your mailing information changes – name of recipient, name of
company/facility, address, etc. Mark the changes on this acknowledgement form and send to us
by mail to the address above or by FAX to 781-335-4253.

RECEIVED: _____

DATE: _____

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The following information is supplied in accordance with the requirements of 10 CFR Part 21.

A. Name and address of individual informing the Nuclear Regulatory Commission:

Larry Friedman – Quality Assurance Manager
Electroswitch
180 King Avenue
Weymouth, MA 02188

B. Identification of the basic component supplied which has a deviation (departure from the technical requirements included in the procure document):

Various Electroswitch products – Series 24 Instrument & Control (Part #24XX, 24XXX, 243XX, 74XXX), Series 24 LOR (part #78XX), Series 24 LOR/ER (part #78XX), Series 24 CSR (part #88XX), Series 24 LSR (part #92XX), Series 31 Instrument & Control (part #31XXX, 65XXX, 75XXX), Series 31 TR/LSR (part #93XX), Series 20 Cam (part #20KB, 20KD, 20LB, 20LD, 20MB, 20MD, 20MF, 20MG, 20PF, 20PG, 20PH, 20PJ, 20PL, 20PY), Series 20 Module (part #10XXX, 17XXX, 18XXX, 19XXX, 29XXX, 30XXX, 32XXX, 38XXX, 40XXX, 60XXX, 61XXX, 62XXX, 63XXX)

C. Identification of the facility supplying the basic component which contains a deviation:

Electroswitch
180 King Avenue
Weymouth, MA 02188

D. Nature of the deviation:

Refer to Appendix A.

E. The date on which the information of such deviation was determined:

On the basis of our evaluation, it was determined on May 10, 2016 that Electroswitch does not have the capability to perform the evaluation to determine if a defect, which could create a substantial safety hazard, exists.

F. The number and location of all basic components which may contain the deviation:

Any Electroswitch product that has a part number listed above in B and was sold as a Safety-Related Class 1B product.

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G. The evaluation and corrective action which has been taken to identify and correct the deviation:

Evaluation: Conducted a detailed review of the test parameters for Dielectric Withstanding Voltage, Insulation Resistance and Contact Resistance in the applicable product qualification reports.

Corrective Action: No further action taken because Electroswitch has ended the 10CFR50 Appendix B Quality Assurance Program effective March 24, 2016.

Refer to Appendix B (actual letter notifying utilities) & Appendix C (list to whom the letter was sent).

H. Any advice related to the identified deviation about the basic component that has been, is being or will be given to purchasers:

Purchasers are being advised to conduct their own evaluation to determine if a defect, which could create a substantial safety hazard, exists.

The following personnel may be contacted regarding this notification:

Larry Friedman
Quality Assurance Manager
781-607-3309

Ed Reszenski
Engineering Manager
781-607-3341

Sincerely,

Larry Friedman
Quality Assurance Manager

cc: K. Lloyd
E. Reszenski

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Appendix A:

1. Criterion III, Design Control, of 10CFR50 Appendix B in part states "Measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in § 50.2 and as specified in the license application, for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. These measures shall include provisions to assure that appropriate quality standards are specified and included in design documents and that deviations from such standards are controlled."

Nonconformance:

Initial Product Qualification Tests for Dielectric Withstanding Voltage, Insulation Resistance and Contact Resistance as defined in Electroswitch's ESC-STD-1000 Rev. 3 dated 9/3/1984 General Specifications for Rotary Switches and Auxiliary Relays for Utility Applications including Class 1E Equipment for Nuclear Power Generating Stations was found to be in contradiction to IEEE C37.90-1978 Relays and Relay Systems Associated with Electric Power Apparatus.

2. Criterion III, Design Control, of 10CFR50 Appendix B in part states "Measures shall also be established for the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems and components."

Nonconformance:

Electroswitch did not procure materials, parts, equipment and/or services from an Appendix B supplier nor were applicable Commercial Grade Surveys, Source Inspections and Material analyses performed for the following materials:

Precious metal **blade** overlay material

Red metal **blade** material

Precious metal overlay thickness of switch **blade** material

Molding compound of switch **insulators** (terminal decks and barriers)

Carbon steel for **securing rods**

SolenoidsRelays

Services (test labs) pertaining to product qualification

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Appendix B:**ELECTROSWITCH • SWITCHES & RELAYS**

UNIT OF ELECTRO SWITCH CORP.

180 King Avenue
Weymouth, MA 02188Telephone: (781) 335-5200
Fax: (781) 335-4253

March 24, 2016

Subject: Ending the 10CFR50, Appendix B Quality Assurance Program

Dear Sir or Madam,

This letter is to serve as formal notification that, after a long and in depth review, Electroswitch will be ending its 10CFR50, Appendix B Quality Assurance Program and the acceptance of safety-related Class 1E product orders effective this date. Any open safety-related Purchase Orders will still be fulfilled.

This decision was based upon the declining market conditions as well as the internal costs necessary to satisfy the methodology to dedicate commercial-grade items for use in safety-related application as described in the recently revised EPR document NP-5652 Revision 1 (Plant Engineering: Guidelines for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications).

As required by 10CFR21.51, "Reporting of Defects and Noncompliance -- Maintenance and Inspection of Records", Electroswitch will retain all the associated records of purchase of basic components for 10 years after the delivery date.

Please note that, under our ISO 9001 Quality System, Electroswitch will still continue to manufacture and sell the same commercial switch products. Electroswitch will accommodate:

1. NUPIC surveys for the purpose of nuclear utilities' Commercial Grade Dedication of Electroswitch products.
2. Source surveillances by the nuclear utilities or 3rd parties for the purpose of Commercial Grade Dedication of Electroswitch products.

We regret we are unable to continue this program and for any inconvenience this may cause.

Please feel free to contact sales with any questions.

Best regards,

Bruce MacDonald
Sales ManagerLarry Friedman
Quality Assurance Manager

**ELECTROSWITCH • SWITCHES & RELAYS**

UNIT OF ELECTRO SWITCH CORP.

180 King Avenue • Weymouth, MA 02188 • Phone 781-335-5200 • Fax 781-335-4253

Appendix C:

Ms. Jennifer Sapp
Ameren Energy
P.O. Box 66892
St Louis, MO 63166

Mr. Lewis Armstrong
Ameren Energy
P.O. Box 66892
St Louis, MO 63166

Ms. Linda Anderson
Dominion Energy
P.O. Box 25459
7th & Main St
Richmond, VA 23260

Ms. Kay Stoeger
Dominion Energy
N490 Highway 42
Kewaunee, WI 54216

Ms. Denise Schmidt
Dominion Energy
N490 Highway 42
Kewaunee, WI 54216

Ms. Tammara George
Duke Energy Corp
Nuclear Supply Chain
410 S. Wilmington St. NC10
Raleigh, NC 27601

Ms. Jennifer Ayres
Energy Northwest
P.O. Box 968
Richland, WA 99352

Ms. Shannon Wasson
Entergy Nuclear
Waterford 3 Nuclear
17265 River Rd. Hwy 18
Hahnville, LA 70057

Ms. Sarah Lamott
Entergy Nuclear
Pilgrim Power Plant
600 Rocky Hill Rd
Plymouth, MA 02360

Mr. Christopher Thomas
Entergy Nuclear
Indian Point Energy
450 Broadway
Buchanan, NY 10511

Ms. Mary Jo Lyraumann
Xcel Energy
Monticello Nuclear
P.O. Box 1470
Denver, CO 80201

Mr. Forrest Nale
MPR Associates
(for FPL)
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Cooper Nuclear
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Ms. Carla Webb
Nextera
Point Beach Nuclear
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Ms. Barbara Novek
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1717 Wakonade Dr E
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Ms. Ella Harris Jordan
Southern Power
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Mr. Ricky Cutcher
Tennessee Valley Authority
Watts Bar Nuclear
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Ms. Carmen Hurren
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Mr. Sean Nelson
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Supply Chain Svcs
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