Part 21 (PAR) Event # 51915

Rep Org:ELECTROSWITCHNotification Date / Time: 05/10/2016 15:59(EDT)Supplier:ELECTROSWITCHEvent 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 PART 21/50.55 REACTORS **EMAIL DEFECTS AND NONCOMPLIANCE** 21.21(d)(3)(i)

PART 21 REPORTING OF DEFECTS AND NONCOMPLIANCE

The following is a synopsis of information received via fax:

"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) [have a potential deviation (departure from the technical requirements included in the procure document)]

"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.

"Any Electroswitch 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 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.

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

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 Part21.

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 1E product.



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

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

<u>Corrective Action:</u> 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 Assumace Manager

ce: 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

Solenoids

Relays

Services (test labs) pertaining to product qualification

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UNIT OF ELECTRO SWITCH CORP.

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Phone 781-335-5200 •

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Appendix B:



180 King Avenue Weymouth, MA 02188

Telephone: (781) 335-5200 Fax: (781) 325-4283

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 delectroswitch 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 bland Purchase Orders will still be fulfilled.

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

As required by 10CFR21.51, "Reporting of Delects and Noncompliance - Maintenance and Inspection of Records", Electroswitch will refund if the associated records of purchase of basic components for 10 years after the delivery give.

Please note that, under our ISO 900 Quarry System, Electroswitch will still continue to manufacture and sell the same commercial switch products. Electroswitch will accommodate:

- NUPIC surveys for the purpose of nuclear utilities' Commercial Grade Dedication of Electroswitch products.
- Source surveillables by the nuclear utilities or 3rd parties for the purpose of Commercial Grade Dedictation of Electroswitch products.

We regret we are update 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 Manager Larry Friedman
Quality Assumnce Manager



ELECTROSWITCH • SWITCHES & RELAYS

UNIT OF ELECTRO SWITCH CORP.

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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. Tammata 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 Buchanon, NY 10511

Ms. MaryJo Lyzenmann **Xcal Energy** Monticello Nuclear P.O. Box 1470 Denver, CO 80201

Mr. Forrest Nale MPR Associates (for FPL) 320 King Street Alexandria, VA 22314

Ms. Ronna Simpson Nebraska Public Power Cooper Nuclear P.O. Box 1740 Columbus, NE 68602

Ms. Carla Webb

Nextera Point Beach Nuclear 6590 Nuclear Road Two Rivers, WI 54241

Ms. Barbara Novek **Xcel Energy** Prairie Island Gen 1717 WakonadeDr E Welch, MN 55089

Mr. Brad Tapley Southern Power Supply Chain 11028 Hatch Pkw N Baxley, GA 31513

Ms. Ella Harris Jordan Southern Power Supply Chain 11028 Hatch Pkw N Baxley, GA 31513

Mr. Thomas Tidwell Southern Power Vogile Elec Gen 7821 River Road Waynesboro, GA 30830

Mr. Alec Scott Pell Tennessee Valley Authority P.O. Box 15500 Knoxville, TN 37902

Mr. Ricky Cutcher Tennessee Valley Authority Watts Bar Nuclear 1270 Nuclear Plant Rd, Hwy 68 Spring City, TN 37381

Mr. Mike Krieger Westburne Ontario/Rexel P.O. Box 1011 Mississanga ON LAT4J9 CAN

Ms. Helene Waddell Westburne Omario/Rexel P.O. Box 1011 Mississauga ON L4T4J9 CAN

Ms. Carmen Hurren Westburne Ontario/Regel P.O. Box 1011 Mississanga ON LAT4J9 CAN

Mr. Sean Nelson Wolf Creek Nuclear Supply Chain Sycs P.O. Box 411 Burlington, KS 66839