

Part 21 (PAR)

Event # 48493

Rep Org: ABB INC. (MEDIUM VOLTAGE SERVICE)		Notification Date / Time: 11/08/2012 14:55 (EST)	
Supplier: ACCUTREX PRODUCTS, INC.		Event Date / Time: 09/14/2012 (EST)	
Last Modification: 11/08/2012			
Region: 1	Docket #:		
City: FLORENCE	Agreement State:	Yes	
County:	License #:		
State: SC			
NRC Notified by: DAVID BROWN	Notifications:	GLENN DENTEL	R1DO
HQ Ops Officer: HOWIE CROUCH		MARVIN SYKES	R2DO
Emergency Class: NON EMERGENCY		CHRISTINE LIPA	R3DO
10 CFR Section:		THOMAS FARNHOLTZ	R4DO
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE		PART 21 GROUP	EMAIL

PART 21 - AN OPERATING MECHANISM FRONT COVER FAILED DURING LICENSEE RECEIPT INSPECTION

The following information was received by facsimile:

"[ABB, Inc. provided] notification of a failure to comply with specifications associated with an operating mechanism front cover P/N 707939A00 used in low voltage electrically operated K-Line circuit breakers. A single occurrence of a newly manufactured circuit breaker failure to close was noted during Next Era Energy Seabrook Station receiving inspection supported by an ABB Medium Voltage Service Field Service Engineer. This circuit breaker was set up and tested satisfactorily during ABB cycle testing, inspection and commercial grade dedication prior to shipping. It was noted during the Seabrook receiving inspection that the control device plunger and secondary close latch were misaligned. Replacement of the operating mechanism front cover improved this alignment and the circuit breaker receipt inspection was completed satisfactorily. Inspection of the subject operating mechanism front cover indicates cause of the misalignment is due to incorrect hole locations for mounting the control device. This operating mechanism front cover was manufactured by Accutrex Products, Inc., an ABB approved vendor.

"Identification of the Subject component: ABB part numbers 707939A00 and 707939B00 operating mechanism covers. These covers are used in operating mechanisms for the K-Line electrically operated circuit breakers rated 2000 amps and below.

"Because of the large potential variety of usages of the affected circuit breakers, ABB (Medium Voltage Service) cannot determine if the potential for a substantial safety hazard exists at any licensee's facility if control device plunger and secondary close latch are misaligned. It is recommended the Licensees determine if the circuit breaker control device plunger and secondary close latch are misaligned at the next convenient maintenance opportunity defined in the ABB K-Line circuit breaker Information Bulletin."

IEI9
MRR

Part 21 (PAR)

Event # 48493

2300 Mechanicsville Road
Florence, South Carolina 29501
(843) 413-4700 – Office Phone
(843) 413-4853 – Office Fax

ABB, Inc.

Fax

To: NRC Operations Center

From: David Brown

Fax: (301) 816-5151

Pages: 4

Phone: (301) 816-5100

Date: 11/8/2012


Re: PART 21 Notification – K-Line Circuit Breaker Operating Mechanism

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

● **Comments:**

This fax is to notify the NRC Operations Center of a failure to comply with specifications associate with an operating mechanism front cover P/N 707939A00 use in low voltage electrically operated K-Line circuit breakers.

Thank you,



david.c.brown@us.abb.com

(843) 413-4782 Work

(843) 496-8161 Cell



November 8, 2012

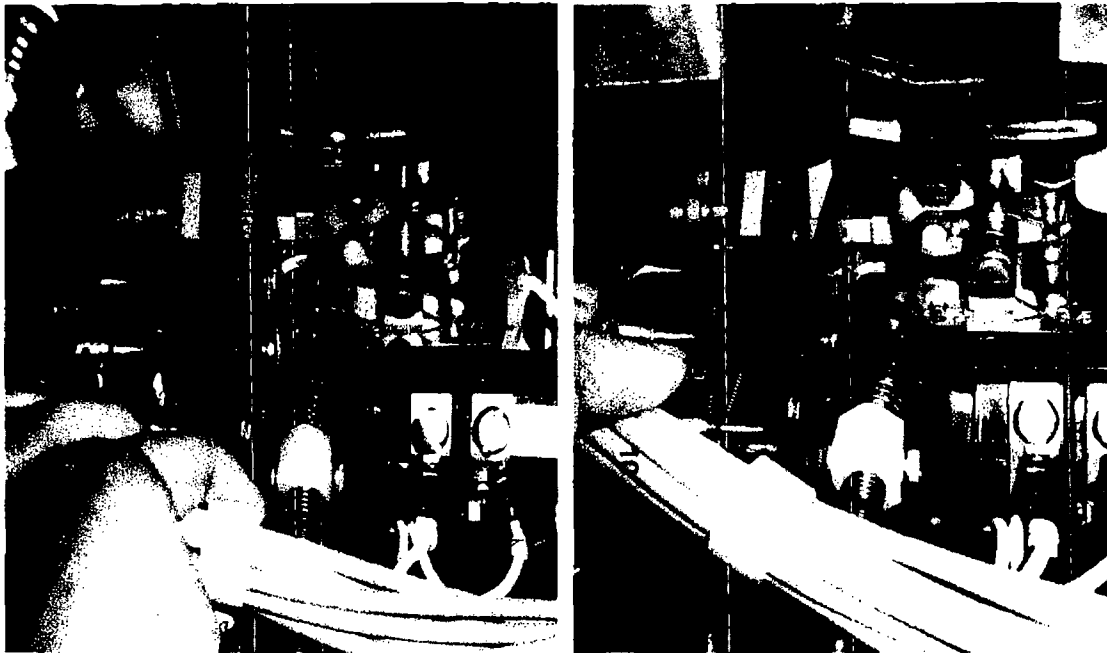
Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
FAX 301-816-5151

Subject: 10CFR Part 21 Notification of Deviation re. K-Line Circuit Breaker Operating Mechanism Covers

1. This letter provides notification of a failure to comply with specifications associated with an operating mechanism front cover P/N 707939A00 used in low voltage electrically operated K-Line circuit breakers. A single occurrence of a newly manufactured circuit breaker failure to close was noted during Next Era Energy Seabrook Station receiving inspection supported by an ABB Medium Voltage Service Field Service Engineer. This circuit breaker was set up and tested satisfactory during ABB cycle testing, inspection and commercial grade dedication prior to shipping. It was noted during the Seabrook receiving inspection that the control device plunger and secondary close latch were misaligned. Replacement of the operating mechanism front cover improved this alignment and the circuit breaker receipt inspection was completed satisfactorily. Inspection of the subject operating mechanism front cover indicates cause of the misalignment is due to incorrect hole locations for mounting the control device. This operating mechanism front cover was manufactured by Accutrex Products, Inc., an ABB approved vendor. Information is provided as specified in 10CFR21 paragraph 21.21(d) (4).
2. Notifying individual: Jay Lavrinc, Vice President & General Manager, ABB (Medium Voltage Service), 2300 Mechanicsville Road, Florence, SC 29501
3. Identification of the Subject component: ABB part numbers 707939A00 and 707939B00 operating mechanism covers. These covers are used in operating mechanisms for the K-Line electrically operated circuit breakers rated 2000 amps and below.
4. Nature of the deviation: One of thirty breakers provided to Seabrook failed to close during receiving inspection. This issue was communicated to ABB 9/14/2012. The subject operating mechanism cover was returned to ABB for inspection and root cause analysis on 9/18/2012. The root cause for the cover hole locations being out of position is corrective maintenance required of the six-part progressive die tooling used in the manufacturing process. Extent of condition performed by ABB indicated all P/N 707939A00 and 707939B00 in inventory had control device mounting hole locations out of position.

ABB Inc.

ABB



Misaligned plunger to secondary close latch.

Correctly aligned plunger to close latch.

5. Corrective actions include:

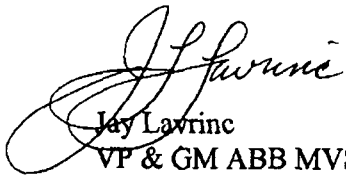
- a. Removed all P/N 707939A00 and 707939B00 covers from inventory. (Action complete)
- b. Notified Accutrex Products, Inc. of the issue and completed process audit of tooling and manufacture of P/N 707939A00 and 707939B00 covers. This review was supported by ABB Supply Chain Manager, QA Engineer and Fabrication Manager. (Action complete)
- c. ABB approved corrective maintenance repairs to five of six pieces of tooling used to manufacture P/N 707939A00 and 707939B00 covers. All maintenance and repairs to these tools are completed. One of six tools was removed from use. Secondary operations were established to drill control device mounting holes after operating mechanism covers manufactured with first piece run expected to be completed 11/15/2012.
- d. Revised P/N 707939A00 and 707939B00 Critical Characteristics to include control device mounting hole locations. (Action complete)

ABB Inc.



Because of the large potential variety of usages of the affected circuit breakers, ABB (Medium Voltage Service) cannot determine if the potential for a substantial safety hazard exists at any licensee's facility if control device plunger and secondary close latch are misaligned. It is recommended the Licensees determine if the circuit breaker control device plunger and secondary close latch are misaligned at the next convenient maintenance opportunity defined in the ABB K-Line circuit breaker Information Bulletin.

Very truly yours,



Jay Lawrinc
VP & GM ABB MVS

ABB Inc.