



Interim Notification per 10 CFR Part 21
March 4, 2019

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001
Fax: (301) 816-5151

Subject: Closure of Interim Report and Potential Part 21

This letter is a follow-up to Interim Notifications dated October 12, 2018 (Ref. ML18302A229) and January 11, 2019 (Ref ML19024A165).

ABB has completed the evaluation of the abnormal appearance of the three motors identified in this notification with the determination that condition does not constitute a defect that would affect the safety related function of the motor. This determination was the result of the testing program performed by ABB and Flowserve - Limitorque which demonstrated that the deformation of the motor frame housing around the stator pin did not result in the motor failing to function.


ABB Motors and Mechanical Inc. (formerly Baldor Electric Company) is notifying the NRC of the closure of this potential Part 21 condition. Records will be maintained in accordance with 10 CFR21.51. Section (vi) & (vii) of the enclosure to this letter have been updated accordingly.

If there are any questions or need for additional information regarding this issue, please contact:

Sheldon Thomas
Quality Manager
ABB Motors & Mechanical Inc.
4349 Avery Drive
Flowery Branch, GA 30542
Phone: (678) 947-7272

Jeff McConkey
Quality Manager - Automation
Flowserve-Limitorque
5114 Woodall Road
Lynchburg, VA 24502
Phone: (434) 845-9738

Sincerely,


Sheldon Thomas
QA Manager, ABB Motors and Mechanical Inc.
Flowery Branch, GA 30542

Enclosure:

Final Report; Event No. ML19024A165 - Interim Notification Information per 521.21

ABB MOTORS AND MECHANICAL INC.
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Final Report: Event No. ML19024A165 - Interim Notification Information per §21.21**(i) Name and address of the individual or individuals informing the Commission.**

Sheldon Thomas
QA Manager
ABB Motors and Mechanical Inc.
4349 Avery Drive
Flowery Branch, GA 30542

(ii) Identification of the basic component supplied for such facility which contains a potential defect.

The basic components being evaluated are Class 1E 40 ft-lb, 56 frame, 2-pole motors supplied to Flowserve - Limitorque for installation on valve actuators to be supplied into nuclear plant applications.

(iii) Identification of the firm supplying the basic component which contains a potential defect.

ABB Motors and Mechanical Inc. (formerly Baldor Electric Company)
4349 Avery Drive
Flowery Branch, GA 30542

(iv) Nature of the potential defect.

ABB was contacted by our customer Flowserve - Limitorque regarding three 40 ft-lb, 56 frame, 2-pole AC electric motors with an abnormal visual appearance of cracked paint and minor deformation of the motor housing material around the stator pin. The stator pin is installed through the motor housing into the stator assembly. ABB's initial inspection of the three motors revealed that the deformation around the pin had likely occurred when the motor was operated during actuator and/or MOV production testing. ABB is evaluating whether this abnormal visual condition of the stator pin interface with the motor frame constitutes a substantial safety hazard.

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

The discovery date of the condition being evaluated is August 2, 2018 and was reported per the initial Interim Notification under Event No. ML18302A229.

- (vi) **Suspect basic component which contains a potential defect, 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.**

A total of three motors were identified as potential defects and came from Flowserve's Raleigh, NC facility.

Limitorque Part #	Electrical Design	Power	Purchase Order #	Date Received	ABB SO#	ABB Part #	Serial Number	Qty
R-390-F04-082100B20	B03024-A-A	3/60/460	192615	May-13	104613675	B777861	B9127197-010-002	1
R-390-F04-082100B20	B03024-A-A	3/60/460	192615	May-13	104613675	B777861	B9127197-010-003	1
R-390-F04-082100B20	B03024-A-A	3/60/460	192615	May-13	104613675	B777861	B9127197-010-004	1

- (vii) **The corrective action, which has been 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.**

ABB's Design Engineering group has implemented a design enhancement for this family of motors to prevent the future occurrence of the condition which prompted the investigation. The enhancement includes the use of two stator pins and enhanced manufacturing controls of the location of the pins in the motor housing. The three motors identified in this notification were disassembled for inspection during the investigation and were subsequently re-assembled with new motor housings.

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

None.