

ABB Motors and Mechanical Inc.

FAX COVER SHEET

Date: October 20, 2026

To: U.S. Nuclear Regulatory Commission (NRC) Operations Center

Fax: (301) 816-5151

From: Sam Bosworth

Title: Quality Manager

Company: ABB Motors and Mechanical Inc.

Phone: 678-947-7274

Email: sam.bosworth@us.abb.com

Pages: 3 (Including Cover Sheet)

Subject: 10 CFR Part 21 Final Notification Report -
Amendment 2

Recipient Information

Organization: U.S. Nuclear Regulatory Commission (NRC)

Attention: NRC Operations Center

Description

Attached is ABB Motors and Mechanical Inc.'s Final Notification Report submitted pursuant to 10 CFR Part 21, dated October 20, 2026.

Document Attached:

- ABB NRC 10CFR21 Final Notification Report 10-20-26.docx (or PDF equivalent)

Please confirm receipt of this notification. If there are any issues with transmission or document legibility, please contact the sender at the number listed above.

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ABB Motors and Mechanical Inc.

Sam Bosworth

Quality Manager

Flowery Branch, Georgia, USA

ABB Motors and Mechanical Inc.
10CFR21 FINAL NOTIFICATION REPORT - Amendment 2

Date: October 20, 2026

To: NRC Operations Center
Phone: 301-816-5100
Fax: 301-816-5151

Dear Sir or Madam:

NUCLEAR NONCONFORMANCE REPORT

1. Informing Organization

ABB Motors and Mechanical Inc., 4349 Avery Drive, Flowery Branch, GA 30542

2. Nature of Defect or Failure to Comply

Potential defects identified in safety-related motors supplied via Flowserve. Flowserve and ABB were informed that during commissioning of a new SMB-3 actuator and valve assembly the actuator motor failed to operate. A summary of a third-party Failure analysis provided by Bruce Power indicated that the likely cause of the failure was attributable to mechanical interference between a rotor balance weight and the stator winding causing insulation damage and turn-to-turn short. To date the subject motor has not been returned to ABB for inspection.

3. Identification of Basic Component

Safety-related AC electric motors for motor-operated valve (MOV) applications.

4. Date of Discovery

April 28, 2026

5. Number and Location of Components

Motor serial number GG215020118 supplied to Flowserve Corp.– Limitorque Actuation.

Motor Identifier: Flowserve part # R-403-F03-080000A20 Description: 100 ft-lb, 3/60/575, 2-pole motor. On 3/17/2022, Flowserve shipped the motor to Trillium Flow Technologies mounted to Limitorque SMB-3 actuator S/N L1281315 on Flowserve Order 188775.005 Subsequently, the actuator & valve were shipped to Bruce Power Tiverton Ontario Canada.

6. Corrective Actions Taken

ABB completed an extensive condition analysis to identify motor designs which could potentially be affected. Subsequently, a review of available Borescope inspections of the motor lot size procured on this specific order was completed eliminating motors which could be visually verified to have no weights added to the rotor during the balancing process. As an engineering enhancement of the motor design, balance weights Have been eliminated. Work instructions have been revised accordingly. Inspection checks have also been implemented to verify no balance weights have been used.

7. Advice to Purchasers

ABB has identified seven motors at risk using several parameters including but not limited to ship date and inspection records. The list of motors below, identified by serial number, is being shared with our customer Flowserve for assistance identifying the location and end user of the motor. This information will be provided when available. It should be noted that if a motor has been in service and operating without issue there is minimal risk for this condition. ABB recommends performing a megger test on the following serial numbers which can be found on the motor nameplate. If utility has a defined preventative maintenance program for insulation resistance follow that protocol. The extent of condition evaluation revealed that 150 ft-lb 2-pole, aluminum rotor construction motors could be suspect as well and were evaluated accordingly. Otherwise, see testing guidance below.

Testing Guidance:

- Compare new megohm readings to historical baseline data
- Consistent readings confirm motor integrity
- For motors without baseline data: acceptable minimum is **≥5 megaohms** (new condition)
- Results at or above baseline = Motor can be cleared from this nonconformance

UNIT Serial #	Motor Start/seat torque	Design V	POLE	Motor Part #	Flowserve's Customer	Flowserve Customer Order #		
Motor Serial Number	Motor Start/seat torque	Power	Speed	Motor Part Number	Flowserve's Customer	Flowserve Customer Order #	Flowserve Ship Date	Flowserve's Customer Purchase Order #
GG18 422 0163	100 ft-lb	3/60/575	2-pole	R-403-F03-082100A20	Bruce Power LP Tiverton , Ontario Canada	170538.001	2/25/2019	00234036
GG21 512 0026	100 ft-lb	3/50/400	2-pole	R-403-F1Q-082100A20	NEK Nuclear PP Krsko, Slovenia	188998.002	4/29/2022	3210966/7699
GG20 132 0128	100 ft-lb	3/60/460	2-pole	R-403-F04-080000A20	APS Palo Verde Tonopah AZ	184173.001	9/28/2020	500631538
GG19 442 0114	150 ft-lb	3/60/460	2-pole	R-404-F04-080000A20	APS Palo Verde Tonopah AZ	176443.001	12/19/2019	500627516
GG19 402 0217	150 ft-lb	3/60/460	2-pole	R-504-F04-080000A20	Framatome Nuclear Parts Center Lynchburg VA	175065.001	11/20/2019	1019015775
B9160683-010-2-CT	150 ft-lb	3/60/460	2-pole	R-404-F04-080000A20	Areva NP Lynchburg VA	146741.001	5/24/2015	1014075569
B1199658-010-1-CT	100 ft-lb	3/60/460	2-pole	R-403-F04-080000A20	Areva NP Lynchburg VA	144612.002	2/6/2015	1014055780

*All motors above were shipped as spare motors and were not mounted to an actuator.

8. Reporting Status

Final Notification - Amended 10/20/26 to add the suffix -T to Motor Serial Numbers B1199658-010-1-C and B9160683-010-2-C.



Sam Bosworth, Quality Manager