

Part 21 (PAR)

Event # 48893

<b>Rep Org:</b> FLOWSERVE CONTROL - LIMITORQUE	<b>Notification Date / Time:</b> 04/05/2013 14:36 (EDT)
<b>Supplier:</b> FLOWSERVE CONTROL - LIMITORQUE	<b>Event Date / Time:</b> 04/04/2013 (EDT)
	<b>Last Modification:</b> 04/05/2013
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> LYNCHBURG	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> VA	
<b>NRC Notified by:</b> JEFF McCONKEY	<b>Notifications:</b> DANIEL RICH R2DO
<b>HQ Ops Officer:</b> BILL HUFFMAN	RAY KELLAR R4DO
<b>Emergency Class:</b> NON EMERGENCY	PART 21 REPORTS E-MAIL
<b>10 CFR Section:</b> 21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

## PART 21 REPORT OF LIMITORQUE VALVES WITH INCORRECT MOTOR NAMEPLATES INSTALLED

The following information is a synopsis of a report received from Flowserve - Limitorque via facsimile:

"During routine Motor Operated Valve testing of a Limitorque SMB-000 actuator prior to being placed into operation, Duke Energy, Catawba Nuclear Station measured motor current readings higher than expected. This actuator was equipped with a 2 ft-lb motor. This motor was returned to Limitorque and subsequently to the motor Original Equipment Manufacturer (OEM). Investigation revealed that this motor was a 5 ft-lb motor mislabeled with the nameplate from a 2 ft-lb motor which explains the measured current draw.

"This notification is limited to a quantity of two motors for Limitorque SMB-000 actuators. Both affected licensees have been notified of this occurrence and both motors have been returned to Flowserve - Limitorque for replacement. [Catawba and Arkansas Nuclear One]

"The defect which occurred is that the 2 ft - lb motor was identified on the nameplate as a 5 ft - lb motor. Similarly the 5 ft - lb motor was identified on the nameplate as a 2 ft - lb motor. Had these motors been placed into service, this defect has the potential to affect safety related operation due to a possible reduction of MOV capability.

"The cause of the defect was due to two motor nameplates being inadvertently interchanged by Flowserve personnel during the painting process prior to shipment. The two motors which are both 48 frame, SMB-000 flanged, Baldor Reliance AC motors were being painted in the same timeframe. The painting process requires the OEM supplied nameplate to be temporarily separated from the motor. Upon the completion of the painting process, Flowserve personnel inadvertently interchanged the nameplates resulting in the 2 ft-lb motor being incorrectly identified as a 5 ft-lb motor. Similarly the 5 ft-lb motor was incorrectly identified on the nameplate as a 2 ft-lb motor. Inspections of the returned motors by Flowserve and the motor OEM confirmed the problem.

JEH  
NER

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"To prevent recurrence of this issue, Flowserve has reviewed and strengthened the relevant procedures regarding verification of motor identification during the installation of the OEM supplied motor nameplate. All personnel associated with this process have been trained by Flowserve QA to the latest revision of the procedures."

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Flowserve  
5114 Woodall Road  
Lynchburg, VA. 24502

# Flowserve

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**To:** NRC Operations Center      **Fax:** (301) 816-5151

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**From:** Jeff McConkey      **Date:** 4/4/2013

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**Re:**      **Pages:** 3 including this cover sheet

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**Notes:** Limitorque Part 21 Notification Final Report Incorrect motor nameplates installed on motors.

Thank You



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Flow Control Division  
**Limatorque**

April 5, 2013

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555-0001

To: NRC Operations Center, Fax # 301-816-5151  
Attn: Document Control Desk

Subject: Flowserve - Limatorque 10 CFR 21.21 Notification  
Incorrect Motor Nameplates Installed on Motors

Reference: Limatorque Part 21 File No: 78

**Background:**

During routine Motor Operated Valve testing of a Limatorque SMB-000 actuator prior to being placed into operation, Duke Energy, Catawba Nuclear Station measured motor current readings higher than expected. This actuator was equipped with a 2 ft-lb motor. This motor was returned to Limatorque and subsequently to the motor OEM. Investigation revealed that this motor was a 5 ft-lb motor mislabeled with the nameplate from a 2 ft-lb motor which explains the measured current draw.

**Identification of the Affected Components:**

This notification is limited to a quantity of two motors for Limatorque SMB-000 actuators. Both affected licensees have been notified of this occurrence and both motors have been returned to Flowserve - Limatorque for replacement.

The affected motors are:

Serial No: B377190-010-T1-FL

Limatorque Part No: R-030-E04-0800

Description: 5 ft-lb, 1700 RPM, 3 phase, 60 Hz, 460 Volts, no heater

This motor was originally supplied to Areva Nuclear Parts Center in July 2008 and subsequently supplied to Duke Energy, Catawba Nuclear Station in December 2011 with a nameplate description for a 2 ft-lb motor. This motor was installed on an actuator supplied to Catawba who performed the MOV testing described above.

Serial No: B9006964-010-T1-FL

Limatorque Part No: R-010-E03-0821

Description: 2 ft-lb, 1700 RPM, 3 phase, 60 Hz, 575 Volts, 120 V 10W heater

This motor was supplied to Entergy, Arkansas Nuclear One in July 2008 with a nameplate description for a 5 ft-lb motor. This motor remained in ANO stock as a spare motor and was never installed on an actuator.



Flow Control Division  
**Limitorque**

**Description of Defect & Potential Impact on Safety Operation:**

The defect which occurred is that the 2 ft-lb motor was identified on the nameplate as a 5 ft-lb motor. Similarly the 5 ft-lb motor was identified on the nameplate as a 2 ft-lb motor. Had these motors been placed into service, this defect has the potential to affect safety related operation due to a possible reduction of MOV capability.

**Cause and Corrective Action:**

The cause of the defect was due to two motor nameplates being inadvertently interchanged by Flowserve personnel during the painting process prior to shipment. The two motors which are both 48 frame, SMB-000 flanged, Baldor Reliance AC motors were being painted in the same timeframe. The painting process requires the OEM supplied nameplate to be temporarily separated from the motor. Upon the completion of the painting process, Flowserve personnel inadvertently interchanged the nameplates resulting in the 2 ft-lb motor being incorrectly identified as a 5 ft-lb motor. Similarly the 5 ft-lb motor was incorrectly identified on the nameplate as a 2 ft-lb motor. Inspections of the returned motors by Flowserve and the motor OEM confirmed the problem.

To prevent recurrence of this issue, Flowserve has reviewed and strengthened the relevant procedures regarding verification of motor identification during the installation of the OEM supplied motor nameplate. All personnel associated with this process have been trained by Flowserve QA to the latest revision of the procedures.

Technical Contacts for this notification:

  
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Kyle Ramsey, Chief Mechanical Engineer, Flowserve - Limitorque

  
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Jeff McConkey, QA Manager, Flowserve - Limitorque