

Part 21 (PAR)

Event # 47505

Rep Org: FLOWSERVE LIMITORQUE ACTUATORS		Notification Date / Time: 12/06/2011 16:43 (EST)	
Supplier: FLOWSERVE LIMITORQUE ACTUATORS		Event Date / Time: 12/05/2011 (EST)	
Last Modification: 12/06/2011			
Region: 1	Docket #:		
City: LYNCHBURG	Agreement State: Yes		
County:	License #:		
State: VA			
NRC Notified by: JEFF McCONKEY	Notifications:	CHRISTOPHER CAHILL	R1DO
HQ Ops Officer: STEVE SANDIN		RANDY MUSSER	R2DO
Emergency Class: NON EMERGENCY		RICHARD SKOKOWSKI	R3DO
10 CFR Section:		NEIL OKEEFE	R4DO
21.21	UNSPECIFIED PARAGRAPH	PART 21 via email	

LIMITORQUE PART 21 NOTIFICATION INTERIM REPORT - POTENTIAL DEFECTIVE PART IN SMB-0 HEAVY SPRING PACK

The following information was received via fax:

Background: During in-house production testing of Limitorque SMB-0 actuators, test lab personnel reported an inability to maintain consistent torque output at the various torque switch settings. Investigation revealed that the actuator torque spring pack assembly had lost preload during the test. Component inspection determined that the loss of preload was due to disc springs that had experienced an excessive permanent relaxation of free height during actuator testing.

Components Affected: Only SMB/SB/SBD-0 actuators with heavy spring pack assemblies shipped between September 15, 2011 and November 7, 2011 could possibly be affected. No parts orders for SMB/SB/SBD-0 replacement heavy spring packs were built in this time period.

Potential Impact on Safety Related Operation: A significant loss of preload on the actuator torque spring pack assembly could result in the actuator producing insufficient output torque thereby affecting proper valve function.

Cause and Corrective Action: Communications with the spring manufacturer revealed that Limitorque was shipped a single lot of springs that were not in accordance with our parts requirements. These springs were incorrectly shipped to Limitorque due to a manufacturer backorder on our normally requested product. Vendor controls have been implemented to prevent reoccurrence of this issue. Limitorque has identified the problem springs and purged them from inventory.

On November 14, 2011 Limitorque notified all affected customers who received the actuators which shipped during

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NRK

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the time period identified above. The serial numbers and locations of the potentially affected actuators are provided in the table below. Limatorque has requested that the actuator spring packs be returned for detailed inspection and replacement if needed.

After inspection of the spring pack assembly of all actuators listed below, Flowserve-Limatorque will issue a follow-up to this interim report on or before February 3, 2012.

Affected Customers/Locations:

Customer - Velan Valve Corp.
Location of Actuator - Velan Valve, Montreal
Limatorque Order No. 110309.001
Quantity - 6
Actuator Serial # 909476-909481

Customer - Velan Valve Corp.
Location of Actuator - Velan Valve, Montreal
Limatorque Order No. 115055.001
Quantity - 1
Actuator Serial # 926332

Customer - Weir Valve Corp.
Location of Actuator - Weir Valve, Ipswich, MA
Limatorque Order No. 106839.008
Quantity - 4
Actuator Serial # 911621-911624

Customer - Weir Valve Corp.
Location of Actuator - Weir Valve, Ipswich, MA
Limatorque Order No. 106839.009
Quantity - 4
Actuator Serial # 911625-911628

Customer - Weir Valve Corp.
Location of Actuator - Weir Valve, Ipswich, MA
Limatorque Order No. 106930.012
Quantity - 4
Actuator Serial # 912769-912772

Customer - Areva NP
Location of Actuator - Exelon, Braidwood NGS
Limatorque Order No. 112724.001
Quantity - 1
Actuator Serial # 917953

Flowsolve
5114 Woodall Road
Lynchburg, VA. 24502

Flowsolve

To: NRC Operations Center

Fax: 301-816-5151

From: Jeff McConkey

Date: 12/6/2011

Re:

Pages: 3

Urgent

For Review

Please Comment

Please Reply

Please Recycle

Notes: Limitorque Part 21 Notification Interim Report Potential Defective Part in SMB-0 Heavy Spring Pack

Jeff McConkey
Quality Assurance Manager
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Flow Control Division
Limitorque

December 5, 2011

To: U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Attention: NRC Operations Center, Fax # 301-816-5151

**Subject: Limitorque Part 21 Notification Interim Report
Potential Defective Part in SMB-0 Heavy Spring Pack**

Background:

During in-house production testing of Limitorque SMB-0 actuators, test lab personnel reported an inability to maintain consistent torque output at the various torque switch settings. Investigation revealed that the actuator torque spring pack assembly had lost preload during the test. Component inspection determined that the loss of preload was due to disc springs that had experienced an excessive permanent relaxation of free height during actuator testing.

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Potential Impact on Safety Related Operation

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Flow Control Division
Limatorque

Customer	Location of Actuator	Limatorque Order No.	Quantity	Actuator Serial #
Velan Valve Corp	Velan Valve, Montreal	110309.001	6	909476 - 909481
Velan Valve Corp	Velan Valve, Montreal	115055.001	1	926332
Weir Valve Corp	Weir Valve, Ipswich, MA	106839.008	4	911621 - 911624
Weir Valve Corp	Weir Valve, Ipswich, MA	106839.009	4	911625 - 911628
Weir Valve Corp	Weir Valve, Ipswich, MA	106930.012	4	912769 - 912772
Areva NP	Exelon, Braidwood NGS	112724.001	1	917953

Submitted By:

A handwritten signature in black ink, appearing to read "Kyle Ramsey".

Kyle Ramsey, Chief Mechanical Engineer

A handwritten signature in black ink, appearing to read "Jeff McConkey".

Jeff McConkey, Quality Assurance Manager

Flowserve Corporation
 Limatorque
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 Lynchburg VA 24506