



Fisher Controls International LLC
301 South First Ave.
P.O. Box 190
Marshalltown, Iowa 50158-0190
USA
T (641) 754-3011
F (641) 754-2830

August 28, 2017

To Whom It May Concern:

Attached is a Fisher Information Notice, (FIN) 2017-04

Emerson Process Management – Fisher Valves complies with the reporting requirements of 10 CFR Part 21 Section 21.21 (b) and 10 CFR Part 50.55 (e) by informing the U.S. Nuclear Regulatory Commission Licensees or Purchaser of deviations or failures to comply.

Please review the attached FIN notice for applicability to your facility.

George Baitinger
Director, Quality Americas

Attachments



IE19
NRR



Fisher Controls International LLC
301 South First Ave
P.O. Box 190
Marshalltown, Iowa 50158-0190
USA
T (641) 754-3011
F (641) 754-2830

Fisher Information Notice: FIN 2017-04

28 AUGUST 2017

Subject:

Erroneous Rotary Seating Torque Calculation in FlowScanner Software

Equipment Affected by this Fisher Information Notice:

This Fisher Information Notice (FIN) applies only to the equipment identified in Appendix A, which lists serial numbers and order numbers that were delivered to customers. Specifically, it applies to FlowScanner 6.6 (build 6.6.000.29) and 6.6 SP1 (build 6.6.000.67). Appendix B of this document includes a decision tree to help customers further determine if this FIN applies to any work performed.

Purpose:

The purpose of this FIN is to alert affected customers that, as of 29 June 2017, Fisher Controls International LLC (Fisher) became aware of a situation which may affect the performance of the aforementioned equipment. Fisher is informing affected customers of this circumstance in accordance with Section 21.21 (b) of 10 CFR 21.

Discussion:

In the process of updating a customer's older FlowScanner software version to 6.6.000.67 (SP1), the customer performed additional software acceptance validation and discovered a discrepancy between the two software versions when calculating Seating Torque values for Rotary Valve assemblies with Lever Arm linkage type.

An equation in 6.6.000.67 is the cause for the discrepancy. This equation was incorrectly written in code with a lack of an additional set of parentheses to order the execution of mathematical functions correctly. In code writing, this is considered a typographical error.

Extent of Condition:

When FlowScanner 6.6 was in development, there was a need to incorporate a new actuator design into the FlowScanner torque calculations. Because of the design of this actuator, the torque equations and configuration database in FlowScanner required modification. This code was modified on 7 November 2012. FlowScanner 6.6 (build 6.6.000.29) and 6.6 SP1 (build 6.6.000.67) were released subsequent this date and contained the erroneous calculation. Shipments of software were stopped on 30 July 2017 and no shipments took place between 29 June 2017 and 30 July 2017.

This code was not transferred to the QUIKLOOK FS software utilized on the QUIKLOOK 3-FS diagnostic system. Thus, this error does not extend into QUIKLOOK FS software.



Fisher Controls International LLC
301 South First Ave
P.O. Box 190
Marshalltown, Iowa 50158-0190
USA
T (641) 754-3011
F (641) 754-2830

Action Required:

The equation has been corrected and full-installation CDs will be ready for distribution to affected customers by 1 December 2017. In addition, a Corrective Action Request (CAR 2017-009) has been initiated by Fisher to prevent reoccurrence of this issue.

Additionally, Software Error Notice SEN17-01 was created and released to affected customers on 2 August 2017.

10 CFR 21 Implications:

Fisher requests that the recipient of this FIN review it and take appropriate action in accordance with 10 CFR 21. If there are any technical questions or concerns, please contact:

Guy Scaggs
Quality Manager
Emerson Automation Solutions
Fisher Lifecycle Services
757 Old Clemson Rd
Columbia, SC 29229
Phone: (803) 462-6203
Guy.Scaggs@Emerson.com

A handwritten signature in black ink, appearing to read 'T. Parrie', is written over a horizontal line.

Tim Parrie
Director, Nuclear Business Unit
Fisher Controls International LLC

Appendix A

List of Affected Equipment

Table 1: FlowScanner 6000 Safety Related Orders with V6.6 Supplied

FS 6000 Serial Number	Purchase Order	Customer Name	Site Name
18355354	412320526	FISHER CONTROLS INTERNATIONAL	Marshalltown
18355355	412320526	FISHER CONTROLS INTERNATIONAL	Marshalltown
18355364	2014120064	EXELON POWERLABS LLC	COATESVILLE
18355369	2337727	FLORIDA POWER AND LIGHT CO	SEABROOK STATION
21392551	2332947	NEXTERA ENERGY	DUANE ARNOLD

Table 2: Stand Alone Software Orders- Safety Related V6.6

Software Piece Serial Number	Purchase Order	Customer Name	Site Name
30000248677-1	70234207	DOMINION NUCLEAR CONNECTICUT INC	Millstone Power Station
30000254452-1	219873	OMAHA PUBLIC POWER DISTRICT	Fort Calhoun Nuclear Station
600044429-1	4123230526	FISHER CONTROLS INTERNATIONAL LLC	Fisher Controls International LLC
600044439-1 thru -16	Order No. 025- S230320960	SOUTHERN CO	Southern Company
600044456-1	2325107	NEXTERA ENERGY POINT BEACH LLC	Point Beach Nuclear Plant

Appendix B

Decision Tree for Applicability

How to determine if this FIN applies to you:

Are you using FlowScanner 6.6 or 6.6 SP1?

- If "YES", do you use FlowScanner 6.6 or 6.6 SP1 to complete a "Dynamic Scan" test on rotary valves with lever arm linkages? Such as any TAG configured with "LEVER ARM" in the "Linkage Type" field for example Fisher Types 1052, 2052, and 1061
- If "YES", do you manually select the significant points for Seating Torque and Break Out Torque from the "Dynamic Scan" test?
- If "YES", do you use the Seating Torque result value provided by FlowScanner for any qualification, validation, or acceptance activities?

If you answered "NO" to ALL of these questions, this software error does not affect your usage of the FlowScanner 6.6 or 6.6 SP1 software.

If you answered "YES" to ANY of the bulleted questions, further evaluation of the affected Seating Torque test results may be necessary. A workaround has been issued to affected customers.