

General Information or Other (PAR)

Event # 43566

Rep Org: ROSEMOUNT NUCLEAR INSTRUMENTS, INC		Notification Date / Time: 08/14/2007 14:40 (EDT)	
Supplier: ROSEMOUNT NUCLEAR INSTRUMENTS, INC		Event Date / Time: 08/14/2007 (CDT)	
Last Modification: 08/14/2007			
Region: 3		Docket #:	
City: CHANHASSEN		Agreement State: Yes	
County:		License #:	
State: MN			
NRC Notified by: ERIC NOVACEK		Notifications: CHARLES R. OGLE R2	
HQ Ops Officer: JEFF ROTTON		VINCENT GADDY R4	
Emergency Class: NON EMERGENCY		VERN HODGE NRR	
10 CFR Section:			
21.21 UNSPECIFIED PARAGRAPH			

ROSEMOUNT 1154 PRESSURE TRANSMITTER CALIBRATION PROBLEM

The supplier provided the following information via facsimile:

Pursuant to 10 CFR Part 21, section 21.21(b) Rosemount Nuclear Instruments, Inc. [RNII] is writing to inform NRC that a total of ten (10) Model 1154 and 1154 Series H output range code 4 pressure transmitters whose model code includes special option suffix N0026 or N0079 may not calibrate at all of the published values [9 shipped to 2 utility sites in the United States].

"During evaluation of two returned Model 1154 output range code 4 pressure transmitters with special option suffix N0026, the cause of the customer-reported calibration problem was isolated to the amplifier circuit card assembly (CCA). Upon replacement of the amplifier CCAs the two affected transmitters calibrated and functioned normally.

"During root cause analysis it was observed that a single resistor (R316) on each affected amplifier CCA had an incorrect resistance value. The R316 resistor enables a standard upper range limit (URL) of a transmitter with output range code four to be increased from 150 inches water to 210 inches water in combination with a minimum span of 75 inches water. This R316 resistor allows the transmitter to achieve performance specifications, calibration ranges, and spans as indicated by the special option drawing.

"To meet site specific application requirements transmitters may be field recalibrated to different upper and lower range values and/or spans. Model 1154 and 1154 Series H transmitters with special option suffix N0026 or N0079 and amplifier CCAs whose R316 resistors were not replaced during the sub-assembly process, will have incorrect resistance values and may not calibrate to all upper and lower range values and/or spans published for the applicable special option. However, if an affected transmitter has been successfully calibrated, having the incorrect resistance value will not adversely affect transmitter performance during normal operation or accident conditions.

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"The manufacturing records for the two returned Model 1154 transmitters (with amplifier CCAs with part number 01154-0001-0006) were carefully reviewed. The sub-assembly traveler lacked the required material traceability information, indicating that the R316 resistors were not replaced. In an abundance of caution RNII carefully reviewed all sub assembly travelers for part number 01154-0001-0006. No other discrepancies were found.

"The corrective action which has been taken; the name of the individual or organization responsible for that action; and the length of time taken to complete that action:

"(a) RNII verified all transmitters in production and finished goods with applicable special options utilizing 01154-0001-0006 amplifier CCA's contained the correct board and resistor. No discrepancies were found. (Complete: 7/24/2007)

"(b) RNII evaluated all 01154 CCA's in production to ensure they contained the correct resistor. No discrepancies were found. (Complete: 7/20/07)

"(c) RNII examined all manufacturing paperwork for 01154-0001-0006 amplifier CCAs built and shipped prior to 7/24/2007. No additional discrepancies were found. (Complete: 7/25/2007)

"(d) An internal corrective action request was initiated. All corrective actions will be completed by 8/15/07.

"The end user is advised to determine the impact of this potential non-conformance on its plant operations and safety and take action as deemed necessary. RNII can supply replacement 01154-0001-0006 amplifier CCAs which can be installed per section five of the product manual or the transmitter can be returned to RNII for rework. If it is determined that return of affected transmitter(s) is required, RNII should be contacted to facilitate the return process."

Plants affected: Saint Lucie (6 received) , and Waterford 3 (3 received).



ROSEMOUNT
Nuclear

Facsimile

Rosemount Nuclear Instruments, Inc.
8200 Market Boulevard
Chanhassen, MN 55317

Telephone 1 (952) 949-7266
Fax 1 (952) 949-5201
Eric.Novacek@EmersonProcess.com

To: NRC Operations Center
Company:
Fax Number: (301) 816-5151
Date: 8/14/07
From: Eric Novacek, Engineering Manager
No. of Pages: 5, *including cover page*

Rosemount Nuclear Instruments is submitting the attached notification as required by 10 CFR Part 21. Please contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Eric Novacek".

Eric Novacek
Engineering Manager
Rosemount Nuclear Instruments, Inc.

14 August, 2007

U.S. Nuclear Regulatory Commission
Washington, DC 20555-001
Attn: Document Control Desk

Re: Notification under 10 CFR Part 21 for Certain Model 1154 and Model 1154 Series H Pressure Transmitters

Pursuant to 10 CFR Part 21, section 21.21(b), Rosemount Nuclear Instruments, Inc. (RNII) is writing to inform you that a total of ten (10) Model 1154 and 1154 Series H output range code 4 pressure transmitters whose model code includes special option suffix N0026 or N0079 as listed in the attached Appendix may not calibrate at all of the published values.

1.0 Name and address of the individual providing the information:

Mr. Marc Bumgarner
Vice President & General Manager
Rosemount Nuclear Instruments, Inc.
8200 Market Blvd
Chanhassen, MN 55317

2.0 Identification of items supplied:

Ten (10) Model 1154 and 1154 Series H pressure transmitters (output range code 4) whose model code includes special option suffix N0026 or N0079 as identified in attached Appendix.

3.0 Identification of firm supplying the item:

Rosemount Nuclear Instruments, Inc.
8200 Market Blvd
Chanhassen, MN 55317

4.0 Nature of the failure and potential safety hazard:

During evaluation of two returned Model 1154 output range code 4 pressure transmitters with special option suffix N0026, the cause of the customer-reported calibration problem was isolated to the amplifier circuit card assembly (CCA). Upon replacement of the amplifier CCAs the two affected transmitters calibrated and functioned normally.

During root cause analysis it was observed that a single resistor (R316) on each affected amplifier CCA had an incorrect resistance value. The R316 resistor enables a standard upper range limit (URL) of a transmitter with output range code four to be increased from 150 inH₂O to 210 inH₂O, in combination with a minimum span of 75 inH₂O. This R316 resistor allows the transmitter to achieve performance specifications, calibration ranges, and spans as indicated by the special option drawing.

In the sub-assembly process, the R316 resistor on a standard amplifier CCA is replaced to create a new CCA part number (01154-0001-0006). The new resistor's material traceability information is recorded on the traveler. In final assembly, each transmitter with special option suffix N0026 and N0079 is assembled using one of these 01154-0001-0006 amplifier CCAs. It then receives a factory calibration check at 135 inH₂O to 210 inH₂O, to ensure conformance to the minimum span and maximum URL specifications, as defined by the special option drawing. Appropriate manufacturing paperwork is used to document and record each amplifier CCA, as well as each final assembly transmitter.

To meet site specific application requirements, transmitters may be field recalibrated to different upper and lower range values and/or spans. Model 1154 and 1154 Series H transmitters with special option suffix N0026 or N0079 and amplifier CCAs whose R316 resistors were not replaced during the sub-assembly process, will have incorrect resistance values and may not calibrate to all upper and lower range values and/or spans published for the applicable special option. However, if an affected transmitter has been successfully calibrated, having the incorrect resistance value will not adversely affect transmitter performance during normal operation or accident conditions.

The manufacturing records for the two returned Model 1154 transmitters (with amplifier CCAs with part number 01154-0001-0006) were carefully reviewed. The sub-assembly traveler lacked the required material traceability information, indicating that the R316 resistors were not replaced. In an abundance of caution, RNII carefully reviewed all sub-assembly travelers for part number 01154-0001-0006. No other discrepancies were found.

5.0 The corrective action which has been taken; the name of the individual or organization responsible for that action; and the length of time taken to complete that action:

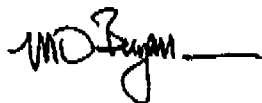
- (a) RNII verified all transmitters in production and finished goods with applicable special options utilizing 01154-0001-0006 amplifier CCA's contained the correct board and resistor. No discrepancies were found. (Complete: 7/24/2007)
- (b) RNII evaluated all 01154-0001-0006 CCA's in production to ensure they contained the correct resistor. No discrepancies were found. (Complete: 7/20/2007)
- (c) RNII examined all manufacturing paperwork for 01154-0001-0006 amplifier CCAs built and shipped prior to 7/24/2007. No additional discrepancies were found. (Complete: 7/25/2007)
- (d) An internal corrective action request was initiated. All corrective actions will be completed by 8/15/07.

6.0 Any advice related to the potential failure of the item:

The end user is advised to determine the impact of this potential non-conformance on its plant operations and safety and take action as deemed necessary. RNII can supply replacement 01154-0001-0006 amplifier CCAs which can be installed per section five of the product manual or the transmitter can be returned to RNII for rework. If it is determined that return of affected transmitter(s) is required, RNII should be contacted to facilitate the return process.

Rosemount Nuclear Instruments, Inc. is committed to the nuclear industry and we assure you that we are dedicated to the supply of high quality products and services to our customers. If there are any questions, or you require additional information related to this issue, please contact: Mike Dougherty (208) 865-1112, Gerard Hanson (952) 949-5233, Bob Cleveland (952) 949-5206, or Matt Doyle (952) 949-5204.

Sincerely,

A handwritten signature in black ink, appearing to read "MB Bumgarner", followed by a horizontal line.

Marc Bumgarner
Vice President & General Manager
Rosemount Nuclear Instruments, Inc.

APPENDIX A: 10 CFR Part 21 Notification – 14 August 2007

Purchase Order	Sales Order	Model Number	Serial Number	Customer	Project	Ship Date
00098034	1646676	1154DP4RAN0026	0532126	FLORIDA POWER AND LIGHT CO	ST. LUCIE	4/27/06
00098034	1646676	1154DP4RAN0026	0532127	FLORIDA POWER AND LIGHT CO	ST. LUCIE	4/27/06
00098034	1646676	1154DP4RAN0026	0532128	FLORIDA POWER AND LIGHT CO	ST. LUCIE	4/27/06
00098034	1799763	1154DP4RAN0026	0533938	FLORIDA POWER AND LIGHT CO	ST. LUCIE	1/9/07
00098034	1799763	1154DP4RAN0026	0533939	FLORIDA POWER AND LIGHT CO	ST. LUCIE	1/9/07
00098034	1799763	1154DP4RAN0026	0533940	FLORIDA POWER AND LIGHT CO	ST. LUCIE	1/9/07
10128180	1735087	1154DP4RCN0079	0533029	ENTERGY CORP	WATERFORD 3 NUCLEAR	8/11/06
10128180	1735087	1154DP4RCN0079	0533030	ENTERGY CORP	WATERFORD 3 NUCLEAR	8/11/06
10128180	1735087	1154DP4RCN0079	0533031	ENTERGY CORP	WATERFORD 3 NUCLEAR	8/11/06