EMERSON.

8200 Market Boulevard
Chanhassen, MN 55317 USA
Tel 1 (952) 949-5210
Fax 1 (952) 949-5201

Facsimile

No. of Pages: 5
Including cover page

To:	NRC Operations Center	**Fax Number:**	(301) 816-5151
Date:	Thursday, March 15, 2018		
From:	Duyen Pham, Quality Manager	**Phone:**	(952) 949-5363
E-Mail:	Duyen.Pham@Emerson.com		
Subject:	**Notification under 10 CFR Part 21 for Certain Model 1154 and Model 1154 Series H Pressure Transmitters and 01154-0163-0002 Amplifier Circuit Card Assemblies**		

Rosemount Nuclear Instruments, Inc. is submitting the attached updated notification as required by 10 CFR Part 21 with the date on which the information of such defect or failure to comply was obtained added to Section 4.0.

Please contact me if you have any questions.

Sincerely,

Duyen Pham
Quality Manager
Rosemount Nuclear Instruments, Inc.

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

Tel 1 (952) 949-5210
Fax 1 (952) 949-5201
www.RosemountNuclear.com

15 March 2018

U.S. Nuclear Regulatory Commission
Washington, DC 20555-001
Attn: Document Control Desk18

Re: Notification under 10 CFR Part 21 for Certain Model 1154 and Model 1154 Series H Pressure Transmitters and 01154-0153-0002 Amplifier Circuit Card Assemblies

Pursuant to 10 CFR Part 21, section 21.21(b), Rosemount Nuclear Instruments, Inc. (RNII) is writing to inform you that a total of eleven (11) Model 1154 and 1154 Series H output range code 4 pressure transmitters whose model code includes special option suffix N0026 or N0087 and five (5) 01154-0153-0002 Amplifier Circuit Card Assemblies as listed in the attached Appendix may not calibrate at all the published values.

1.0 Name and address of the individual providing the information:
Mr. Gerard Hanson
Vice President & General Manager
Rosemount Nuclear Instruments, Inc.
8200 Market Blvd
Chanhassen, MN 55317

2.0 Identification of items supplied:
Eleven (11) Model 1154 and 1154 Series H output range code 4 pressure transmitters whose model code includes special option suffix N0026 or N0087 and five (5) 01154-0153-0002 Amplifier Circuit Card Assemblies as identified in the attached Appendix.

The 01154-0153-0002 Amplifier Circuit Card Assembly is used only with output code R over-ranged range code 4 options including N0026 and N0087.

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 01154-0153-0002 Amplifier Circuit Card Assemblies (CCAs), it was observed that a single resistor (R316) on each affected Amplifier CCA had an incorrect resistance value.

The N0026 and N0087 special options enable a standard upper range limit (URL) of a transmitter with output range code 4 to be increased from 150 inH_20 to 210 inH_20, in combination with a minimum span of 75 inH_20. 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 Amplifier CCA part number (01154-0153-0002). The R316 resistor enables the standard lower range limit (LRL) of a transmitter with output range code 4 to be decreased from -150 inH20 to -210 inH20 (negative pressure values imply pressure applied to the low-pressure side of the transmitter), in combination with a minimum span of 75 inH20. This R316 resistor allows the transmitter to achieve performance specifications, calibration ranges, and spans as indicated by the special option drawing.

The new resistor's material traceability information is recorded on the traveler. In final assembly, each transmitter with special option suffix N0026 and N0087 is assembled using one of these 01154-0153-0002 Amplifier CCAs. It then receives a factory calibration check at 135 inH_20 to 210 inH_20 and customer specified calibrated range, 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 serial number, 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 N0087 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 specifications during normal operation or accident conditions.

The manufacturing records for the two returned Amplifier CCAs, part number 01154-0153-0002, were carefully reviewed. The sub-assembly traveler lacked the required material traceability information, indicating that the R316 resistors were not replaced. RNII reviewed all sub-assembly travelers for part number 01154-0153-0002. The issue has been isolated to one lot which included (16) Amplifier CCAs.

On March 8, 2018, RNII concluded that a substantial safety hazard may exist.

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 previously discontinued manufacturing 01154-0153-0002 Amplifier CCAs, there are no Amplifier CCAs currently in production or finished goods.

(b) RNII examined all manufacturing paperwork for all 01154-0153-0002 Amplifier CCAs, and other than the single lot of (16) Amplifier CCAs described above, no additional discrepancies were found.

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. Affected 01154-0153-0002 Amplifier CCA(s) and transmitter(s) can be returned to RNII for rework. Contact RNII 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, Paul Schmeling (952) 949-5359, or Brian VanderWoude (952) 949-5207.

Sincerely,

Gerard Hanson
Vice President & General Manager
Rosemount Nuclear Instruments, Inc.

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

Tel 1 (952) 949-5210
Fax 1 (952) 949-5201
www.RosemountNuclear.com

APPENDIX A: 10 CFR Part 21 Notification – 15 March 2018

Shipped as piece parts (P/N 01154-0153-0002)

Purchase Order	Sales Order	CCA Serial Number	Customer	Site	Ship Date
10414134	3884268	0151667	Entergy	ANO	6/27/14
10414134	3884268	0151706	Entergy	ANO	6/27/14
10431750	4140165	0151869	Entergy	ANO	2/18/15
10423801	3994314	0151918	Entergy	ANO	11/3/14
10421255	4079414	0151790	Entergy	Waterford	1/19/15

Shipped as part of transmitter (N0026 and N0087)

Purchase Order	Sales Order	Model Number	Transmitter S/N	CCA S/N	Customer	Site	Ship Date
500581048	3818701	1154DP4RAN0026	0552968	0151846	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552969	0151928	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552970	0151937	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552971	0151810	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552972	0151819	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552973	0151696	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552974	0151914	Pinnacle West	Palo Verde	6/5/14
500581048	3818701	1154DP4RAN0026	0552975	0151664	Pinnacle West	Palo Verde	6/5/14
02301969 REL 00013	3840060	1154DP4RAN0026	0552976	0151828	FP&L	St. Lucie	6/2/14
443261	3855762	1154HH4RCN0087	0553320	0146181	Constellation	Calvert Cliffs	7/16/14
443261	3855762	1154HH4RCN0087	0553321	0151689	Constellation	Calvert Cliffs	7/16/14