

Part 21 (PAR)

Event # 50020

Rep Org: ROSEMOUNT NUCLEAR INSTUMENTS, INC		Notification Date / Time: 04/10/2014 11:50 (EDT)	
Supplier: ROSEMOUNT NUCLEAR INSTUMENTS, INC		Event Date / Time: 04/10/2014 (CDT)	
Last Modification: 04/10/2014			
Region: 3	Docket #:		
City: CHANHASSEN	Agreement State:		Yes
County:	License #:		
State: MN			
NRC Notified by: DUYEN PHAM		Notifications: PATTY PELKE R3DO	
HQ Ops Officer: CHARLES TEAL		PART 21 GROUP EMAIL	
Emergency Class: NON EMERGENCY			
10 CFR Section:			
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE			

PART 21 - MODEL 1154HP TRANSMITTERS WITH INTEGRAL 1159 REMOTE DIAPHRAGM SEALS MAY EXHIBIT DEGRADED FUNCTIONAL RELIABILITY

"Pursuant to 10 CFR Part 21, section 21.21(b), Rosemount Nuclear Instruments, Inc. (RNII) is writing to inform you that certain Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals may exhibit degraded functional reliability.

"The standard maximum working pressure for Model 1154 transmitters with integral 1159 Remote Diaphragm Seals is 2000 psi.

"Per the unique requirements of Point Beach Nuclear Generating Station, Model 1154HP5RAGN0080 pressure transmitters with integral 1159A50AS0111 Remote Diaphragm Seals were manufactured to operate at a non-standard maximum working pressure of 2750 psi.

"Once installed in the field, two transmitters exhibited unexpected drift in the output signal when operated at line pressures of approximately 2235 psi.

"To date there are no known additional reported functional reliability issues with other Model 115x Series transmitters with integral 1159 Remote Diaphragm Seals in a similar configuration.

"RNII does not have complete information relating to specific plant applications and therefore cannot determine the potential effects of the condition on plant operation.

"This notification affects seven Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals shipped to Point Beach Nuclear Generating Station since March 2013."

*JEI9
NRC*

Name and address of the individual providing the information:

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



ROSEMOUNT
Nuclear

8200 Market Boulevard
Chanhassen, MN 55317 USA

Tel 1 (952) 949-5210
Fax 1 (952) 949-5201

Facsimile

No. of Pages: 4
Including cover page

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

Date: Thursday, April 10, 2014

From: Duyen Pham, Quality Manager **Phone:** (952) 949-5363

E-Mail: Duyen.Pham@Emerson.com

Subject: Notification under 10 CFR Part 21 on certain Rosemount Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals shipped to Point Beach Nuclear Generating Station

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

Sincerely,

Duyen Pham
Quality Manager
Rosemount Nuclear Instruments, Inc.

ROSEMOUNT[®] Nuclear

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

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

10 April 2014

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

Re: Notification under 10 CFR Part 21 on certain Rosemount Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals shipped to Point Beach Nuclear Generating Station

Pursuant to 10 CFR Part 21, section 21.21(b), Rosemount Nuclear Instruments, Inc. (RNII) is writing to inform you that certain Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals may exhibit degraded functional reliability.

- The standard maximum working pressure for Model 1154 transmitters with Integral 1159 Remote Diaphragm Seals is 2000 psi.
- Per the unique requirements of Point Beach Nuclear Generating Station, Model 1154HP5RAGN0080 pressure transmitters with integral 1159A50AS0111 Remote Diaphragm Seals were manufactured to operate at a non-standard maximum working pressure of 2750 psi.
- Once installed in the field, two transmitters exhibited unexpected drift in the output signal when operated at line pressures of approximately 2235 psi.
- To date there are no known additional reported functional reliability issues with other Model 115x Series transmitters with integral 1159 Remote Diaphragm Seals in a similar configuration.

RNII does not have complete information relating to specific plant applications and therefore cannot determine the potential effects of the condition on plant operation.

This notification affects seven Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals shipped to Point Beach Nuclear Generating Station since March 2013.

1.0 Name and address of the individual providing the information:

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

2.0 Identification of items supplied:

Seven 1154HP transmitters with integral 1159 Remote Diaphragm Seals shipped from RNII to Point Beach Nuclear Generating Station since March 2013.

3.0 Identification of firm supplying the item:

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

4.0 Nature of the failure and potential safety hazard:**Technical Overview:**

Failure analysis efforts have demonstrated the output drift is due to a slow loss of fill fluid in one of the 1159 Remote Diaphragm Seal systems. The loss of fill fluid is due to a leak in the system, however failure analysis efforts to date have not determined the leak path. Testing suggests the leak may be related to non-standard processing associated 1159 applications requiring maximum working pressures in excess of 2000 psi.

Potential Safety Hazard:

A leak in 1159 capillary fill fluid can cause the output to slowly drift over time. Excessive loss of fill fluid, over time, may result in a loss of transmitter functionality.

On April 4, 2014, RNII concluded that a substantial safety hazard may exist.

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

Existing and new orders for Model 1154HP transmitters with Integral 1159 Remote Diaphragm Seals with a maximum working pressure above 2000 psi will undergo extended production drift testing to verify performance prior to shipment.

Mr. Marc Bumgarner, VP & GM of Rosemount Nuclear Instruments, Inc. is responsible for any further action related to this issue.

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

RNII recommends implementing appropriate drift monitoring of the seven affected Model 1154HP transmitters with integral 1159 Remote Diaphragm Seals.

RNII is committed to the nuclear industry and remains dedicated to the supply of high quality products to our customers. If you have any questions, or require additional information related to this issue, please contact: Mike Dougherty (208) 865-1112.

Sincerely,



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

Enc.: Appendix A – List of Affected Transmitters by Serial Number

**Appendix A: List of Affected Transmitters by Serial Number
10 CFR Part 21 Notification - 10 APRIL 2014
NEXTERA ENERGY, POINT BEACH LLC**

Sales Order	Purchase Order Number	Model Number	Serial Number	Ship Date
3492435	2300727 REV 003 REL 00001	1154HP5RGN0080 w/ 1159A50AS0111	548595	Mar-13
3492435	2300727 REV 003 REL 00001	1154HP5RGN0080 w/ 1159A50AS0111	548596	Mar-13
3492435	2300727 REV 003 REL 00001	1154HP5RGN0080 w/ 1159A50AS0111	548597	Mar-13
3492435	2300727 REV 003 REL 00001	1154HP5RGN0080 w/ 1159A50AS0111	548615	Mar-13
3737832	02300727 REV 001 REL 00005	1154HP5RGN0080 w/ 1159A50AS0111	551728	Jan-14
3737829	02300727 REV 001 REL 00004	1154HP5RGN0080 w/ 1159A50AS0111	551742	Feb-14
3737829	02300727 REV 001 REL 00004	1154HP5RGN0080 w/ 1159A50AS0111	551743	Feb-14