12/07/2007

U.S. Nuclear Regulatory Commission Operations Center Event Report

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General Ir	nformation or Other (PAR)		Event #	43826
	ROSEMOUNT NUCLEAR ROSEMOUNT NUCLEAR	Êv	ion Date / Time: 12/06/2007 14: ent Date / Time: 11/15/2007 st Modification: 12/06/2007	03 (EST) (CST)
Region: City: County: State:	CHANHASSEN	Docket #: Agreement State: \ License #:		
HQ Ops	fied by: DAVID T. ROBERTS Officer: JASON KOZAL Y Class: NON EMERGENCY Section:	Notifications:	RICHARD BARKLEY RANDY MUSSER CHUCK CAIN PART 21 GROUP -EMAIL	Ŕ1 R2 R4
21.21	UNSPECIFIED PARAGRAPH	, · · ·	JULIO LARA	R3
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PART 21 - POTENTIAL INSUFFICIENT THREAD ENGAGEMENT FOR CERTAIN PRESSURE TRANSMITTERS

Rosemount Nuclear Instruments, Inc. (RNII) reported that certain Model 1152, 1153 Series B and D, and 1154, and 1154 Series H Pressure Transmitters may have inadequate thread engagement between the electronics housing and sensor module. Transmitters affected by this notification may not confirm to RNII specifications under accident conditions. Supplier testing has determined that no immediate risk exists, however it is RNII's opinion that two threads of engagement may not be sufficient to assure that the product will perform its intended safety function over the qualified life of the transmitter.

The following are the potentially affected licensees: Oyster Creek, Calvert Cliffs, Kewaunee, North Anna, Millstone, Surry, Turkey Point, Vogtle, Diablo Canyon, Shearon Harris, South Texas Project, Browns Ferry, and Wolf Creek.

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Facsimile

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

> Telephone 1 (952) 949-5234 Fax 1 (952) 949-5201 David.Roberts@Emerson.com

To:	NRC Operations Center	
Company:		
Fax Number:	(301) 816-5151	
Date:	12/6/07	•
From:	David Roberts, Quality Manager	
No. of Pages:	15, 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,

Darl T Rff

David T. Roberts 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

6 December 2007

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

Re: Notification under 10 CFR Part 21 for certain Models 1152, 1153 Series B & D, 1154, and 1154 Series H Pressure Transmitters

Pursuant to 10 CFR Part 21, section 21.21(b), Resemount Nuclear Instruments, Inc. (RNII) is writing to inform you that Models 1152, 1153, and 1154 pressure transmitters listed in Appendix 2 and shipped to your facility between August 28, 2006 and September 29, 2006 may have inadequate thread engagement between the electronics housing and sensor module. Transmitters affected by this notification may not conform to RNII's published specifications under accident conditions.

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 Blvd Chanhassen, MN 55317

2.0 Identification of items supplied:

Models 1152, 1153, and 1154 pressure transmitters identified in Appendix 2.

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:

In mid-November 2007, RNII received specific feedback from a customer regarding an 1154 series H transmitter. Photos indicated that the thread engagement between electronics housing and sensor module was roughly 1.5+2 threads.

Testing was conducted on four transmitters: two units assembled to the worst case condition, and two units assembled with nominal thread engagement. Resonance frequency testing was performed to assess the impact on seismic qualification. A leak check was then performed to assess the environmental qualification. There were no significant differences in resonant frequency or amplitude, and no leaks were detected.

However, while these results indicate that no immediate risk exists, it is RNII's opinion that two threads of engagement may not be sufficient to assure that the product will perform its intended safety function over the qualified life of the transmitter. As a result, notification is being made under 10CFR21 to the customers that purchased a transmitter from the potentially affected population.

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The potentially affected population was determined from a previously issued internal corrective action request pertaining to the module / electronics housing thread engagement, which isolated the affected population to a single operator (see Attachment 2). At that time, the known worst case thread engagement was determined to have sufficient design margin to assure that the transmitter could fulfill its intended safety function.

A procedure has been developed so that thread engagement can be checked in the field without any disassembly or removal of the pressure transmitter. This procedure is provided in Attachment 1.

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:

- RNII held shipments of all transmitters while the potentially affected population was identified.
- All potentially affected transmitters in finished goods were inspected and reworked if necessary.
- All transmitters in-process were inspected for the desired thread engagement and reworked if necessary.
- Corrective actions, which included incorporation of a set of go / no-go gauges at mechanical assembly, were implemented to ensure that the electronics housing would be assembled with the desired thread engagement.
- Customers affected by this notification should perform a dimensional check to confirm adequate thread engagement. Instructions are provided in Attachment 1.
- Transmitters that do not meet the dimensional criteria may not have adequate thread engagement and should be reworked in accordance with the operating manual or returned to RNII for rework.

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

The end user is advised to determine the impact of this defect upon its plant's operation and safety, and take action as deemed necessary. The electronics housing can be removed and re-installed in accordance with the operating manual. Alternatively, affected transmitters can be returned to RNII for rework at no charge.

Rosemount Nuclear Instruments, Inc. 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, Gerard Hanson (952) 949-5233, Bob Cleveland (952) 949-5206, or Matt Doyle (952) 949=5204.

Sincerely,

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



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APPENDIX 1: Inspection for acceptable thread engagement

(A) For Model 1152, 1153 Series B & D, and 1154 Pressure Transmitters

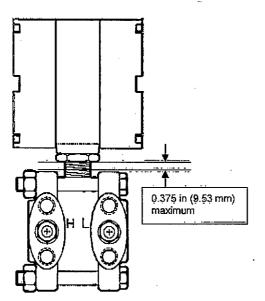
1. Using machinist parallels, gage blocks, or equivalent, measure the distance between the top of the flanges and the bottom of the lock nut as indicated in the figure below.

2. If the distance is greater than 0.375 inches, the transmitter should be reworked in accordance with the operating manual or returned to RNII for rework.

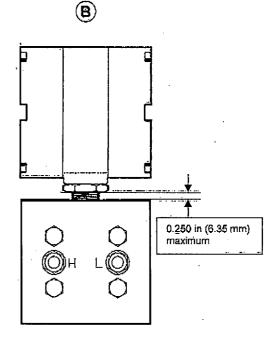
(B) For Model 1154 Series H Pressure Transmitter

(A)

- 1. Using machinist parallels, gage blocks, or equivalent, measure the distance between the top of the metal shroud and the bottom of the lock nut as indicated in the figure below.
- 2. If the distance is greater than 0.250 inches, the transmitter should be reworked in accordance with the operating manual or returned to RNII for rework.



Model 1152, 1153 Series B & D, and 1154



Model 1154 Series H



Amergen Energy Co LLC

Sales Order	Purchase Order	Model Number	\$/N	Ship Date	Site
1741689	80 102205 REV 1 REL 41	1153DB4RJ	533218	31-Auġ-06	Oyster Creek NGS
1741689	80 102205 REV 1 REL 41	1153DB4RJ	533 <u>2</u> 19	31-Auġ-06	Oyster Creek NGS

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Constellation Nuclear

Sales Order	Purchase Order	Model Number	8/N	Ship Date	Site
1745042	418436	11548H9RBN0034	53317 <u>2</u>	11-Sep-06	Calvert Cliffs

Dominion Energy Kewaunee

Sales Order	Purchase Order	Model Number	S/N	Ship Date	Site].
1747213	45450382	1152HP5L22T1805PM	533012	29-Aug-06	Kewaunee	1



Dominion Generation

Sales Order	Purchase Order	Model Number	S/N	Ship Dațe	Site
1743278	45448949	1153HB6PA	533195	28-Aug-06	North Anna Power Station
1736453	45446441	1154GP7RH	533165	30-Aug-06	Millstone Power Station
1729026	45443188	1152DP3N22PB	533203	30-Aug-06	Surry Power Station



Florida Power and Light Co

Sateş Order	Purchase Order	Model Number	\$/N	Ship Date	Site
1744793	95897	1153HD5PAN0065	533251	31-Aug-06	Turkey Point Nuclear 3 & 4
1744793	95897	1153HD5PAN0065	533252	31-Aug-06	Turkey Point Nuclear 3 & 4
1744793 `	95897	1153HD5PAN0065	533253	31-Aug-06	Turkey Point Nuclear 3 & 4

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Georgia Power Co

Sales Order	Purchase Order	Model Number	S/N	Ship Date	Site
1745987	7072754	1154SH9RH	533222	6-Sep-06	Vogtle Electric Generating Plant
1745987	7072754	1154SH9RH	533223	6-Sep-06	Vogtle Electric Generating Plant

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Pacific Gas and Electric Co

Sales Order	Purchase Order	Model Number	S/N	Ship Date	Site
1732406	130124	1152DP5N92PB	533289	18-Sep-06	Diablo Canyon
1732406	130124	1154DH5RC	533257	18-Sep-06	Diablo Canyon
1732406	130124	1154DH5RC	533258	18-Sep-06	Diablo Canyon
1732406	130124	1154DH5RC	533259	18-Sep-06	Diablo Canyon
1732406	130124	1154DH5RC	533260	18-Sep-06	Diablo Canyon
1732406	130124	1154DH5RC	533261	18-Sep-06	Diablo Canyón
1732406	130124	1154DH5RC	533262	18-Sep-06	Diablo Canyon

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APPENDIX 2: 10 CFR Part 21 Notification - 6 December 2007.

Progress Energy Carolinas Inc

Sáles Order	Purchase Order	Model Number	S/N	Ship Date	Site
1732337	276495	1153GB8RA	533221	5-Sep-06	Shearon Harris Nuclear Plant



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STP Nuclear Operating Co

Saleş Order	Purchase Order	Model Number	S/Ņ	Ship Date	Site
1733177	77428	1153GD9RB	533220	31-Aug-08	South Texas Project EGS



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APPENDIX 2: 10 CFR Part 21 Notification - 6 December 2007.

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1	Bales Order	Purchase Order	Model Number	S/N	Ship Date	Site
17	42540	00000151 REL 00220	1152DP3N22PB	533205	29-Sep-06	Browns Ferry Nuclear Plant



Wolf Creek Nuclear Operating Corp

Sales Order	Purchase Order	Model Number	S/N	Ship Date	Site
1732811	735109 REV 4	1154DP4RG	533254	14-Sep-06	Wolf Creek
1732811	735109 REV 4	1154DP4RG	533255	14-Sep-06	Wolf Çreek
1732811	735109 REV 4	1154DP4RG	533256	14-Sep-06	Wolf Creek

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