

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

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25 November 2025

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

## Re: Notification under 10 CFR Part 21 for Rosemount Model 3154 Pressure Transmitters with Select Wire Wound Resistor Lots

Pursuant to 10 CFR Part 21, section 21.21, Rosemount Nuclear Instruments, Inc. (RNII) is writing to inform you that certain Rosemount Model 3154 pressure transmitters have exhibited a higher field return rate as a result of electronics assembly failure caused by an open circuit condition in certain precision wire wound resistors.

Rosemount Nuclear Instruments, Inc., does not have complete information relating to specific plant applications and therefore cannot determine the potential effects of this condition on plant operation.

### 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:

This notification pertains to certain Model 3154 Pressure Transmitters or spare electronics assemblies manufactured between November 2015 and November 2022, listed in Appendix A.

This notification only pertains to Model 3154 Pressure Transmitters or spare electronics assemblies listed in Appendix A. All other Rosemount pressure transmitters are excluded from this notification.

#### 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:

The safety function of the Rosemount Model 3154 pressure transmitter is to measure gage, absolute or differential pressure and transmit a proportional electrical signal within specified accuracy limits prior to, during, and following completion of the postulated design basis events.

RNII field return data indicates certain Rosemount Model 3154 pressure transmitters have exhibited a higher field return rate as a result of electronics assembly failure caused by an open circuit condition in certain precision wire wound resistors. Failure analysis determined the open circuit condition is a result of corrosion of the resistive wire element which leads to an annunciated off-scale low failure of the 4-20mA analog output signal (i.e. analog output failing below 4mA). In some cases, the off-scale

low failure may be preceded by observable erratic behavior of the analog output and/or analog output drift outside of published specifications. If the analog output is erratic or drifting outside of published specifications, the transmitter output should be considered unreliable.

Through third party testing of field failures and consultation with the wire wound resistor manufacturer, it was determined that the failures are a result of premature corrosion of the resistive wire element, which can lead to resistance drift and an electrically open condition. RNII investigation has determined the higher failure rate is associated with certain lots of wire wound resistors.

Failure rates within the listed population of Model 3154 remain very low and most users have not experienced this failure mode. Less than 0.65% of Model 3154's within the scope of this notification experienced this failure mode.

As of this notice, 70% of Model 3154 wire wound resistor failures occurred at two reactor sites, suggesting higher failure rates may be experienced at individual locations. This notification aims to broaden awareness of this potential failure mode.

# 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:

RNII revised the design of all Rosemount 3150 series nuclear qualified pressure transmitters to utilize higher reliability precision resistor technologies. This revision is fully qualified and implemented for all Rosemount 3150 series models including, but not limited to, Rosemount Model 3154.

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

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

- RNII recommends that users review the application where any of the Model 3154 pressure transmitters listed in Appendix A are used to determine any safety consideration in the operation of the plant.
- RNII recommends reporting any observed failures in the Model 3154 pressure transmitters listed in Appendix A to RNII at the contact information below.
  - Model 3154 pressure transmitters exhibiting failure symptoms can be returned to RNII for repair.
  - Alternatively, electronics assembly replacement can be conducted by users on site.
     Replacement instructions are provided in Rosemount 3150 Series Reference Manual, 00809-0100-4835 Section 5, and spare electronics assembly information is provided in Section 6.
  - As indicated in Rosemount 3150 Series Reference Manual, 00809-0100-4835 Section 6, it is recommended as a general practice that users maintain 1 spare electronics assembly for every 25 Rosemount 3150 series pressure transmitters on site.
- RNII provides the following information to consider when reviewing applications:



- As of November 24, 2025, less than 0.65% of Model 3154's within the scope of this notification experienced this failure mode. 70% of reported failures occurred at two reactor sites.
- Rosemount Model 3154 pressure transmitters within the scope of this notification are considered fully functional unless failure symptoms consistent with the description in paragraph 4.0 are identified.

Rosemount Nuclear Instruments, Inc. is committed to the nuclear industry and dedicated to the supply of high-quality products and services to our customers. If there are any questions, or for customer inquiries for obtaining replacement electronics assemblies please contact Rosemount Nuclear Instruments Inc at 952-949-5200 (RNII.info@emerson.com) or the appropriate world area support personnel listed below.

<u>United Sates of America</u> Amber Coffman <u>amber.coffman@emerson.com</u> +17632158863

Europe, Middle East, Africa, Latin America Geert Vermaerke geert.vermaerke@emerson.com +3227167720

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John Wulterkens
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+19529495231

Sincerely,

Gerard Hanson Vice President & General Manager

Gerard Hanson

Rosemount Nuclear Instruments, Inc.

Impacted Utilities		
Site	Utility	Mail Address
		8315 County Road 459
Callaway	Ameren Corp.	Steedman, MO 65077-1285
		American Electric Power
		500 Circle Drive,
DC Cook	American Electric Power Co. Inc.	Buchanan, Michigan 49107-1395
		APS
		PO BOX 52034
Palo Verde	Arizona Public Service Co.	Phoenix, AZ 85072-2034
Millstone		DOMINION ENERGY, INC.
North Anna		INNSBROOK TECHNICAL CENTER
Surry		5000 DOMINION BOULEVARD
VC Summer	Dominion Energy, Inc.	GLEN ALLEN, VA 23060
Catawba		
Harris		
Robinson		Duke Energy
Mcguire		PO Box 1006
Oconee	Duke Energy	Charlotte, NC 28201-1004
		FENOC
		5501 N. State Route 2
Davis-Besse	Energy Harbor	Oak Harbor, OH 43449-976
		Beaver Valley Power Station
		P.O. Box 4
Beaver Valley	Energy Harbor	Shippingport, PA 15077
		ENERGY NORTHWEST
		76 NORTH POWER PLANT LOOP
Columbia	Energy Northwest	RICHLAND WA 99354
Arkansas Nuclear One		
Indian Point		Entergy Nuclear Operation
River Bend		1340 Echelon Parkway
Waterford 3	Entergy Operations Inc.	Jackson, MS 39213
		EXELON GENERATION CO LLC
		35100 S STATE RTE 53
Braidwood	Constellation Energy Generation LLC	BRACEVILLE IL 60407-9619
		CONSTELLATION ENERGY GENERATION LLC
		BYRON WAREHOUSE
		4450 N GERMAN CHURCH RD
Byron	Constellation Energy Generation LLC	BYRON IL 61010-9750
		CONSTELLATION ENERGY GEN LLC
		DRESDEN WAREHOUSE
		6500 NORTH DRESDEN RD
Dresden	Constellation Energy Generation LLC	MORRIS IL 60450-9765
		EXELON GENERATION CO LLC
		RE GINNA NUCLEAR POWER PLANT WAREHOUSE
		1503 LAKE RD
Ginna	Constellation Energy Generation LLC	ONTARIO NY 14519-9364
		CONSTELLATION ENERGY GEN LLC
		LASALLE WAREHOUSE
		2601 N 21ST RD
LaSalle	Constellation Energy Generation LLC	MARSEILLES IL 61341-9757
		CONSTELLATION ENERGY GEN LLC
		QUAD CITIES WAREHOUSE
		22710 206TH AVE N
Quad Cities	Constellation Energy Generation LLC	CORDOVA IL 61242-9740

Impacted Utilities		
Site	Utility	Mail Address
	,	CONSTELLATION ENERGY NUCLEAR GROUP LLC
		1650 CALVERT CLIFFS PKWY
Calvert Cliffs	Constellation Energy Generation LLC	LUSBY MD 20657-4700
outroit sums		Florida Power & Light
		St. Lucie Nuclear Plant
		6501 S. Ocean Drive
St. Lucie	Florida Power & Light	Jensen Beach, FL 34957
		Florida Power & Light
		Turkey Point Nuclear Plant
		9760 SW 344th Street
Turkey Point	Florida Power & Light	Homestead, FL 33035
Farley		SOUTHERN NUCLEAR OPERATING COMPANY
Hatch		P. O. BOX 1295
Vogtle	Southern Nuclear Operating Co.	BIRMINGHAM, AL 35201
		Luminant Generation Company LLC
		Comanche Peak NPP
		P.O. Box 1002
Comanche Peak	Luminant Generation Company LLC	Glen Rose, TX. 76043
Comanene r cak	Zammani Comercianon Company 220	NextEra Energy Resources
		6610 Nuclear Road
Point Beach	NextEra Energy Resources	Two Rivers, WI 54241-9516
	Trond and a second	NextEra Energy Resources
		Seabrook Station
		PO Box 300
Seabrook	NextEra Energy Resources	Seabrook, NH 03874
		DIABLO CANYON MATERIALS FACILITY
		4340 OLD SANTA FE ROAD
Diablo Canyon	Pacific Gas & Electric	SAN LUIS OBISPO, CA 93401
Diable Ganyon		PSEG Nuclear, LLC
		P.O. Box 236
Salem/Hope Creek	PSEG	HANCOCKS BRIDGE, NJ 08038
		STP NUCLEAR OPERATING COMPANY
		P.O. BOX 289
South Texas Project	South Texas Project	WADSWORTH, TX 77483
Browns Ferry		TVA Nuclear Power Group
Seguoyah		1101 Market Street, LP 4AC;
Watts Bar	TVA	Chattanooga, Tennessee 37402-2801
Tracto Bai		WOLF CREEK NUCLEAR OPERATING CORP
		1550 OXEN LN NE
Wolf Creek	Wolf Creek Nuclear Operating Corp.	BURLINGTON KS 66839-9127
		XCEL ENERGY INC
		MONTICELLO NUCLEAR GENERATING PLANT
		2807 W COUNTY RD 75
Monticello	Xcel Energy Inc	MONTICELLO MN 55362-9601
		PRAIRIE ISLAND NUCLEAR GENERATING PLANT (PINGP)
		1717 WAKONADE DRIVE, EAST
Prairie Island	Xcel Energy Inc	WELCH, MN 55089