



July 2, 2025

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

Attention: Document Control Desk

Subject: Notification of Potential Defect - 10CFR Part 21

Product: Magnetrol displacer level switch **A103F-3X-Y-MPG-TDM-SMD4DC**

AMETEK Magnetrol is submitting the following Report of a Potential Defect in accordance with the requirements of 10CFR Part 21.

I can be contacted either by email at the address below or by phone on 1-412-260-8937 if further clarification is required.

Sincerely,



Dennis Hungerman
Div VP, Business Unit Manager
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COMPONENT DESCRIPTION:

Magnetrol top mount displacer type level switch, seismic qualified, model **A103F-3X-Y-MPG-TDM-SMD4DC**.

DESCRIPTION OF DEVIATION

On April 1, 2025, AMETEK Magnetrol was notified by a customer of calibration issues encountered with a displacer level switch during a work order replacement on the Emergency Diesel Generator Room Sump Pump. The customer was unable to determine whether the displacer switch was within specifications. The displacer level switch, which had been pulled from the customer's stock, was subsequently returned to us on May 21, 2025, for evaluation. Upon receipt and inspection on May 22, 2025, we identified the unit as a refurbished displacer level switch shipped on February 02, 2015. Records confirm that the displacer level switch was properly calibrated prior to shipment. Our evaluation determined that the calibration no longer met the original specifications established at the time of shipment. The calibration deviation was isolated to the switch mechanism subassembly. While the alarm setpoint remained within specification, a slight drift was observed in the reset point. All switch components were confirmed to be within their respective design tolerances.

The returned switch mechanism was successfully recalibrated to meet the original drawing and order specifications by following our standard switch mechanism calibration procedure.

CAUSE

The calibration drift of the displacer level switch is attributed to the extended storage period of approximately ten years.

EFFECT ON SYSTEM PERFORMANCE:

While the deviation does not appear to result from a manufacturing or refurbishment defect, the observed calibration shift may impact the displacer level switch's ability to perform its intended safety function without recalibration. After high level actuation, the switch may reset at a level past the specified differential.

ACTION REQUIRED:

As a precautionary measure, AMETEK Magnetrol is contacting all customers who purchased models that contain this switch mechanism within the past twenty years. We recommend that customers verify the calibration of any such displacer level switches that have remained in storage for an extended period prior to installation.

To support this effort, AMETEK Magnetrol will provide detailed instructions on how to perform the calibration verification. This guidance will help ensure that the displacer level switches meet operational specifications and perform their intended safety function reliably.

Customers are encouraged to contact our Field Service department at fieldservice.magnetrol@ametek.com with any questions or to request the calibration verification instructions.





AMETEK MAGNETROL CORRECTIVE ACTION:

AMETEK Magnetrol will not pursue any further corrective action, as this displacer level switch and switch mechanism are inactive products and are no longer available for sale. Additionally, the evaluation of the returned unit revealed no manufacturing or design defects. The observed calibration drift is attributed to the extended storage duration over the ten-year period since shipment.

CUSTOMER NOTIFICATION LIST

CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
ALABAMA POWER CO	QP050364	9/062005	057-2000-102	1	577877-01-001
ALABAMA POWER CO	QP060297	6/21/2006	057-2000-102	1	592096-01-001
ALABAMA POWER CO	QP061070	4/2/2007	057-2000-102	1	605469-01-001
ALABAMA POWER COMPANY	QP090915001	8/5/2010	057-2000-102	1	656082-01-001
ARIZONA PUBLIC SERVICE CO	500548335	2/28/2011	057-0002-001	20	667366-01-001
					667366-01-002
					667366-01-003
					667366-01-004
					667366-01-005
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					667366-01-014
					667366-01-015
					667366-01-016
					667366-01-017
					667366-01-018
					667366-01-019





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					667366-01-020
COLTEC INDUSTRIES INC	1062590B	3/17/2004	057-5000-001	1	556574-01-001
COLTEC INDUSTRIES INC	1070282B	6/21/2005	057-2001-101	1	571910-01-001
COLTEC INDUSTRIES INC	1073463B	10/25/2005	057-2000-902	1	577729-01-001
COLTEC INDUSTRIES INC	1096474	11/26/2007	057-2000-902	1	615905-01-001
COLTEC INDUSTRIES INC	1107445	5/8/2009	057-2000-902	1	641629-01-001
COLTEC INDUSTRIES INC	1121083	8/23/2011	057-2000-902	1	675676-01-001
COLTEC INDUSTRIES INC	1138013	11/27/2013	057-2000-902	1	711745-01-001
CONSTELLATION ENERGY GROUP	7722241	9/12/2011	057-0002-001	3	676351-01-001
					676351-01-002
					676351-01-003
DUKE ENERGY CAROLINAS LLC	00101637	7/23/2008	057-2001-903	2	625923-01-001
					625923-01-002
DUKE ENERGY CAROLINAS, LLC	00100999	9/2/2008	057-2001-903	12	625197-01-001
					625197-01-002
					625197-01-003
					625197-01-004
					625197-01-005
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					625197-01-011
					625197-01-012





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
DUKE ENERGY CAROLINAS, LLC	00104163	9/11/2008	057-2001-903	2	628727-01-001
					628727-01-002
DUKE ENERGY CAROLINAS, LLC	00107917	12/12/2008	057-2001-903	6	633257-01-001
					633257-01-002
					633257-01-003
					633257-01-004
					633257-01-005
					633257-01-006
DUKE ENERGY CAROLINAS, LLC	00112587	6/30/2009	057-2001-903	6	638401-01-001
					638401-01-002
					638401-01-003
					638401-01-004
					638401-01-005
					638401-01-006
DUKE ENERGY CAROLINAS, LLC	00121433/00126958	3/8/2010	057-2001-903	1	658129-01-001
DUKE ENERGY CAROLINAS, LLC	00121433/00126958	3/8/2010	057-2001-903	1	658129-02-001
DUKE ENERGY CAROLINAS, LLC	00135944	3/11/2011	057-2001-903	7	666883-01-001
					666883-01-002
					666883-01-003
					666883-01-004
					666883-01-005
					666883-01-006
					666883-01-007
DUKE ENERGY CAROLINAS, LLC	00135944	3/11/2011	057-2001-903	6	666883-04-001
					666883-04-002
					666883-04-003
					666883-04-004
					666883-04-005



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CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					666883-04-006
DUKE ENERGY CAROLINAS, LLC	00137911	3/23/2011	057-2001-903	1	669366-01-001
DUKE ENERGY CAROLINAS, LLC	00140895	6/27/2011	057-2001-903	12	673574-01-001
					673574-01-002
					673574-01-003
					673574-01-004
					673574-01-005
					673574-01-006
					673574-01-007
					673574-01-008
					673574-01-009
					673574-01-010
					673574-01-011
					673574-01-012
DUKE ENERGY CAROLINAS, LLC	00153355	7/20/2012	057-2001-903	2	690039-01-001
					690039-01-002
DUKE ENERGY CAROLINAS, LLC	00153574	7/23/2012	057-2001-903	3	690955-01-001
					690955-01-002
					690955-01-003
DUKE ENERGY CAROLINAS, LLC	00160667	11/20/2012	057-2001-903	3	700144-01-001
					700144-01-002
					700144-01-003
DUKE ENERGY CAROLINAS, LLC	00161687	10/25/2012	057-5000-001	6	701662-01-001
					701662-01-002
					701662-01-003
					701662-01-004
					701662-01-005
					701662-01-006





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
DUKE ENERGY CAROLINAS, LLC	00161952	4/12/2013	057-2001-903	2	702060-01-001
					702060-01-002
DUKE ENERGY CAROLINAS, LLC	00174386	5/13/2014	057-2001-903	3	724847-01-001
					724847-01-002
					724847-01-003
DUKE ENERGY CAROLINAS, LLC	00182329	12/2/2014	057-2001-903	3	730191-01-001
					730191-01-002
					730191-01-003
DUKE ENERGY CAROLINAS, LLC	00186007	2/17/2015	057-2001-903	2	734405-01-001
					734405-01-002
DUKE ENERGY CAROLINAS, LLC	00186007	2/17/2015	057-2001-903	1	734405-03-001
DUKE ENERGY CAROLINAS, LLC	00147588	1/9/2015	057-2001-903	1	738955-01-001
DUKE ENERGY CAROLINAS, LLC	00167405	2/2/2015	057-2001-903	1	741329-01-001
DUKE ENERGY CAROLINAS, LLC	00192020	4/27/2015	057-2001-903	2	741352-01-001
					741352-01-002
DUKE ENERGY CAROLINAS, LLC	00199041	5/11/2015	057-2001-903	1	745164-01-001
DUKE ENERGY CAROLINAS, LLC	00197141	9/21/2015	057-2001-903	1	747734-01-001
DUKE ENERGY CAROLINAS, LLC	00197594	6/17/2015	057-5000-001	3	748232-01-001
					748232-01-002
					748232-01-003
DUKE ENERGY CORPORATION	NE6139	2/19/2003	057-2001-903	5	529705-01-001
					529705-01-002
					529705-01-003
					529705-01-004



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CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					529705-01-005
DUKE ENERGY CORPORATION	NE8537	6/6/2003	057-2001-903	1	540842-01-001
DUKE ENERGY CORPORATION	00735541	2/18/2015	057-2000-103	1	734291-01-001
EAGLE PROCESS CONTROLS KOREA LTD.	EPK12027	12/22/2011	057-0002-001	8	682762-01-001
					682762-01-002
					682762-01-003
					682762-01-004
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					682762-01-006
					682762-01-007
					682762-01-008
EAGLE PROCESS CONTROLS KOREA LTD.	EPK-12627	6/10/2013	057-0002-001	10	707411-01-001
					707411-01-002
					707411-01-003
					707411-01-004
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					707411-01-007
					707411-01-008
					707411-01-009
					707411-01-010
EDISON MATERIAL SUPPLY LLC	6L246032	7/19/2006	057-5000-001	6	594095-01-001
					594095-01-002
					594095-01-003
					594095-01-004
					594095-01-005
					594095-01-006
EDISON MATERIAL SUPPLY LLC	6L276035	12/21/2006	057-2002-001	1	599831-01-001





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
EDISON MATERIAL SUPPLY LLC	4500177387	1/27/2010	057-2002-001	2	650859-01-001
					650859-01-002
EDISON MATERIAL SUPPLY LLC	4500231675	6/25/2010	057-2002-001	1	656865-01-001
EDISON MATERIAL SUPPLY LLC	4500243320	4/30/2010	057-5000-001	6	658326-01-001
					658326-01-002
					658326-01-003
					658326-01-004
					658326-01-005
					658326-01-006
EDISON MATERIAL SUPPLY LLC	4500461407	3/29/2012	057-2002-001	2	687029-01-001
					687029-01-002
ELECTRABEL N.V	4500339860	1/26/2012	057-5000-001	15	070135-01-001
					070135-01-002
					070135-01-003
					070135-01-004
					070135-01-005
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					070135-01-011
					070135-01-012
					070135-01-013
					070135-01-014
					070135-01-015
ELECTRABEL N.V	4500372501 05.01.07	1/26/2012	057-5003-001	2	073952-01-001
					073952-01-002
ELECTRABEL N.V	P004_9900103613	1/26/2012	057-5003-001	2	089337-01-001



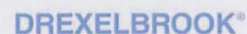


CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					089337-01-002
ELECTRABEL NV/SA	P004_9900150634	10/18/2011	057-5000-001	7	093123-02-001
					093123-02-002
					093123-02-003
					093123-02-004
					093123-02-005
					093123-02-006
					093123-02-007
ELECTRABEL NV/SA	P004_9900206656	5/21/2012	057-5003-001	1	096747-01-001
ELECTRABEL NV/SA	P004_9900235351	1/9/2013	057-5000-001	5	098928-01-001
					098928-01-002
					098928-01-003
					098928-01-004
					098928-01-005
ELECTRABEL NV/SA	9900321483	7/4/2014	057-5003-001	2	106864-01-001
					106864-01-002
ELECTRABEL NV/SA	9900335111	12/5/2014	057-5003-001	4	108394-02-001
					108394-02-002
					108394-02-003
					108394-02-004
ELECTRABEL NV/SA	9900346229	9/18/2015	057-5000-001	2	109671-03-001
					109671-03-002
ELECTRABEL NV/SA	9900351629	9/2/2015	057-5000-001	7	110240-03-001
					110240-03-002
					110240-03-003
					110240-03-004
					110240-03-005
					110240-03-006





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					110240-03-007
ELECTRABEL NV/SA	9900357997	9/10/2015	057-5000-001	1	110759-01-001
ELECTRABEL NV/SA	9900366159	6/30/2015	057-5003-001	2	111609-01-001
					111609-01-002
ENGINE SYSTEMS INC	89551	3/4/2009	057-5000-001	3	641237-01-001
					641237-01-002
					641237-01-003
ENTERGY LOUISIANA LLC	10430470	2/13/2015	057-0002-001	4	742658-01-001
					742658-01-002
					742658-01-003
					742658-01-004
EXELON BUSINESS SERVICES CO	00479378	1/24/2012	057-5000-001	2	685937-01-001
					685937-01-002
EXELON BUSINESS SERVICES COMPANY, LLC	00515692	2/25/2014	057-5000-001	2	725080-01-001
					725080-01-002
FCX PERFORMANCE, INC.	34011100	7/19/2006	057-0002-001	2	596772-01-001
					596772-01-002
FCX PERFORMANCE, INC.	34011877	12/19/2006	057-0002-001	2	603483-01-001
					603483-01-002
FCX PERFORMANCE, INC.	4008880	11/21/2007	057-0002-001	1	620173-01-001
FCX PERFORMANCE, INC.	4016408	2/6/2008	057-0002-001	2	623407-01-001
					623407-01-002



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CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
FCX PERFORMANCE, INC.	4038159	8/29/2008	057-0002-001	2	633674-01-001
					633674-01-002
FCX PERFORMANCE, INC.	4063822	6/19/2009	057-0002-001	2	645594-02-001
					645594-02-002
FIRST ENERGY CORP	7109682	1/22/2003	057-5000-001	1	535509-01-001
FIRSTENERGY NUCLEAR OPERATING CO	45120554	6/9/2004	057-5000-001	1	558577-01-001
FIRSTENERGY NUCLEAR OPERATING CO	45161649	1/23/2006	057-5000-001	7	586747-01-001
					586747-01-002
					586747-01-003
					586747-01-004
					586747-01-005
					586747-01-006
					586747-01-007
FIRSTENERGY NUCLEAR OPERATING CO	45298388	8/11/2009	057-2002-005	3	643582-01-001
					643582-01-002
					643582-01-003
FIRSTENERGY NUCLEAR OPERATING CO	45301486	9/2/2009	057-2000-102	2	644905-01-001
					644905-01-002
FIRSTENERGY NUCLEAR OPERATING CO	45305776	1/6/2010	B75-1B30-DEM	4	646848-01-001
					646848-01-002
					646848-01-003
					646848-01-004
FIRSTENERGY NUCLEAR OPERATING CO	45317730	2/3/2010	057-5000-001	3	653065-01-001
					653065-01-002
					653065-01-003
FIRSTENERGY NUCLEAR OPERATING CO	45359541	4/4/2011	057-5000-001	7	673840-01-001



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CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					673840-01-002
					673840-01-003
					673840-01-004
					673840-01-005
					673840-01-006
					673840-01-007
GEORGIA POWER CO.	7087981	9/25/2009	057-5000-001	4	647046-01-001
					647046-01-002
					647046-01-003
					647046-01-004
GEORGIA POWER CO.	7091411	5/28/2010	057-5000-001	8	658072-01-001
					658072-01-002
					658072-01-003
					658072-01-004
					658072-01-005
					658072-01-006
					658072-01-007
					658072-01-008
GEORGIA POWER CO.	SNG10108354	8/17/2015	057-5000-001	16	750994-01-001
					750994-01-002
					750994-01-003
					750994-01-004
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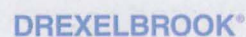
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CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					750994-01-015
					750994-01-016
GEORGIA POWER CO.	SNG10108354	8/31/2015	057-5000-001	1	754705-01-001
H M MILLER SALES CO (INC)	150825	7/26/2005	057-0002-001	1	579155-01-001
LUMINANT GENERATION CO LLC	S06773546S2	3/7/2011	057-2000-102	2	670089-01-001
					670089-01-002
LUMINANT GENERATION CO LLC	S07130276S2	11/15/2011	057-2001-902	2	681773-01-001
					681773-01-002
LUMINANT GENERATION CO LLC	S07987006S2	1/8/2016	057-2000-102	2	728362-01-001
					728362-01-002
NATIONAL TECHNICAL SYSTEM	56370N	6/16/2006	057-5000-001	2	592514-01-001
					592514-01-002
NINE MILE POINT NUCLEAR STATION LLC	7726253	5/04/2012	057-5000-001	6	692301-01-001
					692301-01-002
					692301-01-003
					692301-01-004
					692301-01-005
					692301-01-006
PINNACLE WEST CAPITAL CORPORATION	500303494	1/24/2007	057-0002-001	2	600080-01-001
					600080-01-002
PINNACLE WEST CAPITAL CORPORATION	500303983	12/20/2006	057-5000-001	2	600749-01-001
					600749-01-002
PINNACLE WEST CAPITAL CORPORATION	500513109	12/20/2007	057-5000-001	2	619699-01-001
					619699-01-002





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
PINNACLE WEST CAPITAL CORPORATION	500545068	7/28/2010	057-5000-001	1	662291-01-001
PINNACLE WEST CAPITAL CORPORATION	500587403	12/23/2010	057-5000-001	1	740740-01-001
PPL SERVICES CORP	00415219	4/23/2008	057-5000-001	2	626791-01-001
					626791-01-002
PPL SERVICES CORP	00440067	1/20/2009	057-5000-001	1	638534-01-001
PROGRESS ENERGY CAROLINAS INC	00214429	4/29/2005	057-5000-001	13	573001-01-001
					573001-01-002
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					573001-01-004
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					573001-01-007
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					573001-01-010
					573001-01-011
					573001-01-012
					573001-01-013
PROGRESS ENERGY CAROLINAS INC	00635152	1/14/2013	057-2000-103	1	702169-01-001
PROGRESS ENERGY FLORIDA INC	00333281	12/14/2007	057-2002-001	1	616174-01-001
PROGRESS ENERGY FLORIDA INC	00390333	11/24/2008	057-2002-001	1	633425-01-001
PROGRESS ENERGY FLORIDA INC	00504273	9/30/2010	057-2002-001	1	663192-01-001
PROGRESS ENERGY FLORIDA INC	544531	3/21/2011	057-2002-001	1	676554-01-001
SCANA SERVICES INC AGENT FOR	NU02SR735751	6/25/2009	057-0002-001	3	644054-01-001



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CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
					644054-01-002
					644054-01-003
SCANA SERVICES, INC.	NU02SR718234	8/11/2003	057-0002-001	5	545767-01-001
					545767-01-002
					545767-01-003
					545767-01-004
SCANA SERVICES, INC.	NU02SR722103	12/16/2004	057-0002-001	4	566577-01-001
					566577-01-002
					566577-01-003
					566577-01-004
SCANA SERVICES, INC.	NU02SR727647	1/30/2007	057-0002-001	3	600542-01-001
					600542-01-001
					600542-01-001
SIMONE ENGINEERING	34004072	5/21/2003	057-0002-001	1	542060-01-001
SOUTH CAROLINA ELEC & GAS	SR716414	11/11/2002	057-5000-001	4	531990-01-001
					531990-01-002
					531990-01-003
					531990-01-004
TENNESSEE VALLEY AUTHORITY	00026519	8/14/2003	057-5000-001	3	546191-01-001
					546191-01-002
					546191-01-003
TENNESSEE VALLEY AUTHORITY	00043554	7/13/2005	057-1006-005	2	572575-01-001
					572575-01-002
TENNESSEE VALLEY AUTHORITY	00044312	7/13/2005	057-5000-001	2	573903-01-001
					573903-01-002
TENNESSEE VALLEY AUTHORITY	00063292	11/28/2007	057-5000-001	1	614920-01-001





CUSTOMER NAME	PO NUMBER	SHIP DATE	PART NUMBER	QTY	SERIAL NUMBER
TENNESSEE VALLEY AUTHORITY	00063292	11/28/2007	057-1006-005	1	614920-03-001
TENNESSEE VALLEY AUTHORITY	00066814	3/03/2008	057-5000-001	2	622226-01-001 622226-01-002
TENNESSEE VALLEY AUTHORITY	00069528	8/12/2008	057-1006-005	2	628201-01-001 628201-01-002
TENNESSEE VALLEY AUTHORITY	00072816	11/03/2008	057-5000-001	4	636786-01-001 636786-01-002 636786-01-003 636786-01-004
TENNESSEE VALLEY AUTHORITY	645999	5/12/2014	057-5000-001	4	728468-01-001 728468-01-002 728468-01-003 728468-01-004
TXU BUSINESS SERVICES	S04611866S2	2/14/2005	057-5000-001	2	571542-01-001 571542-01-002
TXU BUSINESS SERVICES	S05431836S2	10/17/2007	057-2001-902	2	613967-01-001 613967-01-002
VIRGINIA ELECTRIC AND POWER CO	45614542	10/31/2008	057-5000-001	1	634111-01-001

