

Part 21 (PAR)

Event # 51972

Rep Org: AMETEK SOLIDSTATE CONTROLS	Notification Date / Time: 06/02/2016 16:30 (EDT)
Supplier: SIGNAL TRANSFORMER	Event Date / Time: 06/02/2016 (EDT)
	Last Modification: 06/03/2016
Region: 3	Docket #:
City: COLUMBUS	Agreement State: Yes
County:	License #:
State: OH	
NRC Notified by: ETHAN SALSBURY	Notifications: DAN SCHROEDER R1DO
HQ Ops Officer: DONG HWA PARK	DAVID HILLS R3DO
Emergency Class: NON EMERGENCY	PART 21/50.55 REACTORS EMAIL
10 CFR Section: 21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE	

PART 21 - NOT APPROVED CURRENT TRANSFORMERS INSTALLED IN SAFETY RELATED EQUIPMENT

The following was excerpted from the Ametek Part 21 Report received via email:

"Ametek inverter manufactured with Signal Transformer R-10607, Ametek part number 80-310879-90 was inadvertently installed in several units from an unapproved supplier. The potential for this situation to occur exists for new equipment delivered between July of 2015 and May of 2016. Affected utilities and equipment serial numbers are identified below.

"Dominion Nuclear Connecticut, Millstone
96000067-0411, 96000067-0511, 96000067-0611, 96000067-0711

"Krsko Nuclear Power Plant
96000068-0211, 96000068-0311, 96000068-0411

"Exelon, Byron Station
96000075-0311, 96000075-0411, 96000075-0511, 96000075-0611

"Ametek Solidstate Controls is submitting the following Report of a Potential Defect in accordance with the requirements of 10CFR Part 21.

"To replace the transformers, Ametek Solidstate Controls will work with you to arrange replacements. Please our Client Services group at 1-614-846-7500. <mailto:eric.phillips@ametek.com>"

The potential problems include:

IE19
NRR

- Mag wire terminated with improper lug and tooling which may cause loss of feedback to static transfer function.
- Spot welded band around the core which has not been adequately seismically evaluated.
- 180 degree Celsius insulation system provided instead of the approved 200 degree Celsius and unapproved materials used which impacts the aging analysis.

*** UPDATE FROM ETHAN SALSBURY TO VINCE KLCO ON 6/3/2016 AT 1103 EDT ***

Serial numbers for KRSKO and Millstone are corrected as follows:

Dominion Nuclear Connecticut, Millstone
96000068-0211
96000068-0311
96000068-0411

KRSKO Nuclear Power Plant
96000067-0411
96000067-0511
96000067-0611
96000067-0711

Notified the R1DO (Schroeder), R3DO (Hills) and Part 21 Group via email.

From: [Ethan Salsbury](#)
To: [HOO Hoc](#)
Subject: [External_Sender] RE: Ametek Solidstate Controls Part 21 Notification
Date: Friday, June 03, 2016 6:39:48 AM
Attachments: [Signal Current Transformer NRC Notification.pdf](#)

There was a minor grammar error in the last sentence in the initial version I submitted. I have attached the correct version. I apologize for the inconvenience.

Thanks,

Ethan Salsbury
Quality Supervisor
Office: 614-410-6293
Mobile: 419-206-1283
Ametek Solidstate Controls
& Prestolite Power

From: HOO Hoc <HOO.Hoc@nrc.gov>
To: Ethan Salsbury <Ethan.Salsbury@ametek.com>,
Date: 06/02/2016 04:30 PM
Subject: RE: Ametek Solidstate Controls Part 21 Notification

We have received your report.

Thank you,

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo1@nrc.sgov.gov



From: Ethan Salsbury [<mailto:Ethan.Salsbury@ametek.com>]
Sent: Thursday, June 02, 2016 4:30 PM
To: HOO Hoc <HOO.Hoc@nrc.gov>
Subject: [External_Sender] Ametek Solidstate Controls Part 21 Notification

Please see the attached concerning a current transformer used in the manufacturing of Ametek Inverters. Feel free to contact me at my office or on my cell phone should you have any questions.

Thanks,

Ethan Salisbury

Quality Supervisor

Office: 614-410-6293

Mobile: 419-206-1283

Ametek Solidstate Controls
& Prestolite Power



SOLIDSTATE CONTROLS

Quality Assurance

875 Dearborn Drive, Columbus, OH 43085 U.S.A.
Telephone: 614-846-7500, 1-800-635-7300
E-mail: ethan.salsbury@ametek.com

June 2, 2016

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: Ametek inverter manufactured with Signal Transformer R-10607, Ametek part number 80-310879-90 was inadvertently installed in several units from an unapproved supplier. The potential for this situation to occur exists for new equipment delivered between July of 2015 and May of 2016. Affected utilities and equipment serial numbers are identified below.

Dominion Nuclear Connecticut, Millstone

96000067-0411
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Krško Nuclear Power Plant

96000068-0211
96000068-0311
96000068-0411

Exelon, Byron Station

96000075-0311
96000075-0411
96000075-0511
96000075-0611

Ametek Solidstate Controls is submitting the following Report of a Potential Defect in accordance with the requirements of 10CFR Part 21. Please contact me if you require any further information.

Sincerely,

Ethan Salsbury
Quality Supervisor
Ametek Solidstate Controls





COMPONENT DESCRIPTION:

10V, 60 Hz Current transformer manufactured by Signal Transformer with Manufacturer Part Number R-10607 and Ametek Part Number 80-310879-90, rev. A.

PROBLEM YOU COULD SEE:

Current Transformers manufactured by Signal Transformer, which is not approved as an Ametek nuclear supplier, was installed in safety-related equipment. This was realized after quality issues surfaced with the transformer in question. After further evaluation, the discrepancies below were discovered. Affected transformers can be readily identified by a white label that states "Signal Transformer" with a manufacturer's part number of R-10607.

- Mag wire terminated with improper lug and tooling which may cause loss of feedback to static transfer function
- Spot welded band around the core which has not been adequately seismically evaluated
- 180 °C insulation system provided instead of the approved 200 °C system and unapproved materials used which impacts the aging analysis

CAUSE:

The part was manufactured in-house to approved materials and methods prior to outsourcing in July of 2015 to a commercial transformer manufacturer.

EFFECT ON SYSTEM PERFORMANCE:

Loss of static switch transfer function on output overload/fault conditions. Unit will attempt to retain load and may default to current limited output with reduced voltage if overload is excessive.

ACTION REQUIRED:

Ametek Solidstate Controls will replace all current transformers manufactured by Signal Transformer with transformers manufactured by Ametek Solidstate Controls.

AMETEK SOLIDSTATE CONTROLS CORRECTIVE ACTION:

To replace the transformers, Ametek Solidstate Controls will work with you to arrange replacements. Please contact our Client Services group at 1-614-846-7500.

<mailto:eric.phillips@ametek.com>

From: [Ethan Salsbury](#)
To: [HOO Hoc](#)
Subject: [External_Sender] RE: Ametek Solidstate Controls Part 21 Notification
Date: Friday, June 03, 2016 11:02:56 AM
Attachments: [Signal Current Transformer NRC Notification .pdf](#)

I received a call from Millstone regarding a discrepancy in the serial numbers listed. The serial numbers for KRSKO and Millstone were switched. I have corrected the issue and attached the revised copy. Again, I apologize for the inconvenience. Please call me on my cell phone or email me if you have any questions.

Thanks,

Ethan Salsbury
Quality Supervisor
Office: 614-410-6293
Mobile: 419-206-1283
Ametek Solidstate Controls
& Prestolite Power

From: HOO Hoc <HOO.Hoc@nrc.gov>
To: Ethan Salsbury <Ethan.Salsbury@ametek.com>,
Date: 06/02/2016 04:30 PM
Subject: RE: Ametek Solidstate Controls Part 21 Notification

We have received your report.

Thank you,

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo1@nrc.sgov.gov



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Sent: Thursday, June 02, 2016 4:30 PM
To: HOO Hoc <HOO.Hoc@nrc.gov>
Subject: [External_Sender] Ametek Solidstate Controls Part 21 Notification

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Thanks,

Ethan Salsbury

Quality Supervisor

Office: 614-410-6293

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Ametek Solidstate Controls

& Prestolite Power



SOLIDSTATE CONTROLS

Quality Assurance

875 Dearborn Drive, Columbus, OH 43085 U.S.A.
Telephone: 614-846-7500, 1-800-635-7300
E-mail: ethan.salsbury@ametek.com

June 2, 2016

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

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Ethan Salsbury
Quality Supervisor
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