

Part 21 (PAR)

Event # 51972

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

"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.

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**AMETEK**

**SOLIDSTATE CONTROLS**

**Quality Assurance**

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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.

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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



**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>