

General Information or Other (PAR)

Event # 44805

Rep Org: AMETEK	Notification Date / Time: 01/26/2009 11:32 (EST)
Supplier: AMETEK	Event Date / Time: 01/26/2009 (EST)
	Last Modification: 01/26/2009
Region: 3	Docket #:
City: COLUMBUS	Agreement State: Yes
County:	License #:
State: OH	
NRC Notified by: ROBERT GEORGE	Notifications: PATTY PELKE R3
HQ Ops Officer: GEROND GEORGE	WAYNE SCHMIDT R1
Emergency Class: NON EMERGENCY	CHUCK CAIN R4
10 CFR Section:	RANDY MUSSER R2
21.21 UNSPECIFIED PARAGRAPH	MJ ROSS-LEE NRR
	THOMAS HARRITY NRR

AMETEK PART 21 REPORT ON TYCO/POTTER & BRUMFIELD RELAYS

The following information was received from AMETEK via facsimile:

"COMPONENT DESCRIPTION: Electro-mechanical 14 pin relays, with AC voltages of 120 and 240, and DC voltages of 12, 24, 48 and 110. The Tyco/P&B relays were removed from the Approved Supplier Listing in 2006. The relays can be installed in Ametek Solidstate Controls equipment, or provided as a spare part.

"PROBLEM YOU COULD SEE: Nuisance alarming or erratic operation of the equipment.

"CAUSE: The problem appears to be an age related degradation of unknown cause. A failure analysis performed by First Energy Laboratory Services identified a potential cause as a crinkled appearance on the surface of the moving contact pads resulting in uneven contact with the opposing stationary contact pad. Over time, a layer of oxidation forms on the pads inhibiting electrical contact and increasing resistance.

"EFFECT ON SYSTEM PERFORMANCE: Potential unstable output voltage caused by intermittent high relay resistance. The relays are generally used for alarm functions but can be used in control circuitry as well.

"ACTION REQUIRED: Replace all Tyco/Potter & Brumfield relays listed below remaining in service with the approved Ametek Solidstate Controls equivalent.

- "Component: Tyco/Potter & Brumfield Relays
- SCI PIN 07-740001 - P&B PIN KHAU-17A18-120
- SCI PIN 07-740002 - P&B PIN KHAU-17A18-240
- SCI PIN 07-740005 - P&B PIN KHAU-17D18-12

JE19
NRR

General Information or Other (PAR)
SCI PIN 07-740006 - P&B PIN KHAU-17D18-24
SCI PIN 07-740007 - P&B PIN KHAU-17D18-48
SCI PIN 07-740008 - P&B PIN KHAU-17D18-110"

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From HOO discussions with AMETEK, the faulty relays are a subcomponent of AMETEK battery chargers, inverters, and uninterruptible power supplies. The manufacturer received notification of the faulty relays from Beaver Valley Power Station. The problem was revealed through a malfunction of a battery charger on 12/11/2008. The manufacturer does not believe that there is an immediate safety concern.



SOLIDSTATE CONTROLS

Quality Assurance

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E-mail: bob.george@ametek.com

Robert E. George
Director of Quality

January 26, 2008

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington D.C. 20555-001

Attention: Document Control Center
Subject: Notification of Potential Defect – 10 CFR, Part 21

Component: Tyco/Potter & Brumfield Relays

SCI P/N 07-740001 – P&B P/N KHAU-17A18-120
SCI P/N 07-740002 – P&B P/N KHAU-17A18-240
SCI P/N 07-740005 – P&B P/N KHAU-17D18-12
SCI P/N 07-740006 – P&B P/N KHAU-17D18-24
SCI P/N 07-740007 – P&B P/N KHAU-17D18-48
SCI P/N 07-740008 – P&B P/N KHAU-17D18-110

Ametek Solidstate Controls recommends ordering replacement relays by the SCI part number above. Replacement relays will be Omron with the same electrical and mechanical values.

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 further information

Sincerely,

Robert E. George
Director of Quality
Ametek Solidstate Controls





SOLIDSTATE CONTROLS
Quality Assurance

AMETEK

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EFFECT ON SYSTEM PERFORMANCE: Potential unstable output voltage caused by intermittent high relay resistance. The relays are generally used for alarm functions but can be used in control circuitry as well.

ACTION REQUIRED: Replace all Tyco/Potter & Brumfield relays listed above remaining in service with the approved Ametek Solidstate Controls equivalent.

AMETEK SOLIDSTATE CONTROLS CORRECTIVE ACTION: If you wish to replace the relays, Ametek Solidstate Controls will work with our clients to arrange for replacements. Please contact Samantha Delaney at 614-410-6205 or Mark Shreve at 614-410-6332. For detailed technical information, contact John Niemi at 614-410-6219. Ametek Solidstate Controls recommends you contact us to request a service technician for an on-site inspection and component replacement. Contact Mrs. Jean Falor of our Client Services Group at 1-800-222-9079 or 1-800-635-7300.



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