

General Information or Other (PAR)

Event # 42551

Rep Org: AMETEK SOLIDSTATE CONTROLS	Notification Date / Time: 05/04/2006 13:23 (EDT)
Supplier: AMETEK SOLIDSTATE CONTROLS	Event Date / Time: 05/04/2006 (EDT)
	Last Modification: 05/04/2006
Region: 3	Docket #:
City: COLUMBUS	Agreement State: Yes
County:	License #:
State: OH	
NRC Notified by: ROBERT GEORGE	Notifications: RONALD BELLAMY R1
HQ Ops Officer: STEVE SANDIN	JOEL MUNDAY R2
Emergency Class: NON EMERGENCY	RICHARD SKOKOWSKI R3
10 CFR Section:	RUSSELL BYWATER R4
21.21 UNSPECIFIED PARAGRAPH	OMID TABATABAI NRR

PART 21 NOTIFICATION INVOLVING POTENTIAL DEFECT IN AEROVOX CAPACITOR

The following information was provided via email:

"COMPONENT DESCRIPTION:

"13uF X 1000V AC capacitors, SCI P/N 07-020139-00, Aerovox P/N H94S1013A0BA, manufactured between January 2004 and December 2004.

"Capacitors can be either installed in Ametek Solidstate Controls UPS equipment or provided as a spare part. The components are schematically identified as C805, C815, or C705.

"PROBLEM YOU COULD SEE:

"The capacitor failures due to this defect will occur early in the operating life of the device. There are no warning signs that a failure is imminent, or detection method for predicting an approaching failure.

"CAUSE:

"The investigation has revealed that the capacitor failures (date codes 0408 and 0436) were due to manufacturing defects. A failure analysis by Aerovox revealed that a foil tab connecting the capacitor winding to the internal terminal became pinched between the lid and the can during the seaming operation. Within the first year of operation, the insulation covering the connecting tab was cut through. This resulted in terminal to case short.

"EFFECT ON SYSTEM PERFORMANCE:

IE19

General Information or Other (PAR)

Event # 42551

"The failures described above, could result in loss of output voltage and transfer of the static switch to the bypass source. The resulting failure could result in a potential damage to the load.

"ACTION REQUIRED:

"The observed failure rate of this component is very low at 0.06% (2 out of 3336 units manufactured between 1/1/04 and 12/31/04.) Aerovox has implemented corrective actions to preclude further failures.

"Based upon the Aerovox evaluation, Ametek Solidstate Controls believes if a defect was present in a capacitor, the likelihood of a failure should occur early in the operating life. We feel the failure rate has been extremely low and the risk is minimal. Each operating facility will need to evaluate the potential risk to their operation.

"AMETEK SOLIDSTATE CONTROLS CORRECTIVE ACTION:

"If you wish to replace the capacitors Ametek Solidstate Controls will work with you to arrange replacements. Please contact Mrs. Jean Falor of our Client Services group at 1-800-222-9079 or 1-614-846-7500 ext. 6230. jean.falor@ametek.com."

Rudimentary listing of stations that received this component installed in equipment or as a spare part:

- Installed in equipment: Oconee, McGuire, Watts Bar, Browns Ferry, STP, Beaver Valley, San Onofre, Nine Mile Point and TMI.
- Spare part: St. Lucie, Palo Verde, Surry, Turkey Point, Diablo Canyon, Harris, Crystal River, Robinson and Comanche Peak.
- International: Korea Hydro, Nuklearna Elec Vrbina, China Nuclear, Laguna Verde and Electrobras.



AMETEK

SOLIDSTATE CONTROLS

Quality Assurance

875 Dearborn Drive, Columbus, OH 43085 U.S.A.
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E-mail: bob.george@ametek.com

Robert E. George
Director of Quality

May 4, 2006

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

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

Subject: 13uF, 1000V AC capacitors, SCI P/N 07-020139-00, Aerovox P/N H94S1013A0BA

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,

Robert E. George
Director of Quality
Ametek Solidstate Controls





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Equipment = 9

Oconee
McGuire
Watts Bar
Browns Ferry
STP
Beaver Valley
San Onofre
Nine Mile Point
TMI

Parts = 9

St. Lucie
Palo Verde
Surry
Turkey Point
Diablo Canyon
Harris
Crystal River
Robinson
Comanche Peak

International = 5

Korea Hydro
Nuklearna Elec Vrbina
China Nuclear
Laguna Verde
Electrobras