



March 1, 2013

Attn: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Subject: 10 CFR Part 21 Report Notification, Dual Alarm Modules and Single Alarm Modules

Dear Sir or Madam:

The purpose of this letter is to notify you of a defect in Dual Alarm Modules (DAM) and Single Alarm Modules (SAM) that may contain faulty diodes in Solid State Relays (SSRs) supplied by Crydom, Inc. resulting in decreased reliability. Details of the defect are provided below.

The written report required shall include, but need not be limited to, the following information, to the extent known:

(i) Name and address of the individual or individuals informing the Commission.

Michael Weinstein  
Director of Quality  
Scientech, a business unit of Curtiss-Wright Flow Control Corporation  
44 Shelter Rock Road  
Danbury, CT 06810

Scott Robuck  
General Manager  
Scientech, a business unit of Curtiss-Wright Flow Control Corporation  
200 S Woodruff Avenue  
Idaho Falls, ID 83401

(ii) Identification of the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

DAM801, a Dual Alarm Module, manufactured by Scientech, Model DAM801(/1 optional), Part number EIP-E287PA-1

SAM801, a Single Alarm Module, manufactured by Scientech, Model SAM801(/1 optional), Part number EIP-E289PA-1

DAM502, a Dual Alarm Module, manufactured by Scientech, Model DAM502, Part number EIP-E297DD-1, -2, -3

TE19  
NRK

SAM502, a Single Alarm Module, manufactured by Scientech, Model SAM502, Part number EIP-E297DD-4

DAM503, a Dual Alarm Module, manufactured by Scientech, Model DAM503, Part number EIP-E304DD-1, -2, -3

SAM503, a Single Alarm Module, manufactured by Scientech, Model SAM503, Part number EIP-E304DD-4, -20

DAM504, a Dual Alarm Module, manufactured by Scientech, Model DAM504, Part number NUS-A131PA

(iii) Identification of the firm supplying the basic component which fails to comply or contains a defect.

Scientech, a business unit of Curtiss-Wright Flow Control Corporation  
200 S Woodruff Avenue  
Idaho Falls, ID 83401

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

Crydom Inc., the sole supplier to Scientech of D4D07 Solid State Relays (SSRs) since before 2009, has informed Scientech that SSRs provided with date codes between 0908 (August 2009) and 1004 (April 2010) may have included faulty diodes which resulted in reduced reliability (early failure) of their SSRs.

The mode of failure is that the module output may not be able to maintain voltage sufficient to activate its external load. It appears that this failure occurs randomly after some duration of operation, typically weeks or months. No common cause has been found.

Scientech screens components for infantile failure by burning-in modules for a minimum of 48 hours prior to final test. There were no SSR failures during burn-in of potentially affected modules, therefore burn-in was not an effective screen for this issue.

Prior to January 2013, Scientech did not track SSRs by date code. In establishing conservative boundaries for product shipped with suspect SSRs, Scientech can be certain that no suspect SSRs were shipped in Scientech products prior to August 2009 (the earliest suspect date code). It was determined in September 2012 that Scientech did not have any SSRs with a date code of 2010 or earlier in inventory or work-in-progress. Scientech can therefore determine that products shipped after September 2012 do not contain suspect SSRs.

(v) The date on which the information of such defect or failure to comply was obtained.

Submitted for evaluation 02/06/2013; evaluation completed 03/01/2013.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

Modules with suspect SSRs comprise a subset of those manufactured by Scientech between 2009 and 2012. The following table estimates the population of potentially affected modules. Scientech is compiling a list of potentially affected modules by part number, serial number and purchase order number.

Plant	EIP-E287PA	EIP-E289PA	EIP-E297DD	EIP-E304DD	NUS-A131PA	Total
Beaver Valley		1				1
Farley			1	2		3
Ginna				72		72
Indian Point 2/3			39			39
Kewaunee					23	23
North Anna			1			1
Prairie Island			5	90		95
Surry	108	134				242
Turkey Point	100	147				247
<b>Total</b>	<b>208</b>	<b>282</b>	<b>48</b>	<b>169</b>	<b>24</b>	<b>730</b>

(vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

1. Scientech has determined that it currently has no SSRs with suspect date codes in inventory or work-in-progress and has established receipt inspection criteria to reject SSRs with suspect date codes.
2. Scientech is notifying plants with potentially affected units (to be completed 03/01/2013).
3. Scientech will send affected plants a list of potentially affected modules by part number, serial number and purchase order (to be completed no later than 03/08/2013).

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

Scientech believes that all SSRs with suspect date codes purchased by Scientech were installed in Scientech products produced between August 2009 and December 2010. However, since SSR date codes were not recorded during manufacture, we cannot eliminate the possibility that SSRs with suspect date codes were installed in Scientech products as late as September 2012.

(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

Not applicable.

Should you have any questions regarding this matter, please contact Robert Queenan, Division Manager, Scientech/Instrumentation and Controls, at (208) 524-9311.

Sincerely,

A handwritten signature in cursive script that reads "Michael B. Weinstein".

Michael B. Weinstein  
Director of Quality Operations  
Scientech, a business unit of Curtiss-Wright Flow Control Corporation  
(203) 448-3346  
(860) 514-9203 (cell)

Cc: Scott Robuck  
Robert Queenan  
John McGimpsey  
Vince Chermak  
QA File