Part 21 ((PAR)			Event #	51	907
Rep Org:	ROTO	RK CONTROLS, INC.	Notificati	ion Date / Time: 05/04/2016 1	4:56 (E	EDT)
Supplier:	JOHNS	SON ELECTRIC	Event Date / Time: 01/25/2016			EDT)
			Las	st Modification: 10/31/2016		
Region:	1		Docket #:			
City:	ROCH	ESTER	Agreement State:	Yes		
County:		•	License #:			
State:	NY					
NRC Not	ified by:	PATRICK SHAW	Notifications:	FRED BOWER	R1D	00
HQ Ops	Officer	: DONG HWA PARK		MIKE ERNSTES	R2D	00
Emergenc	y Class:	: NON EMERGENCY		NICK VALOS	R3D	00
10 CFR Section:				JOHN KRAMER	R4D	00
21.21(d)(3	3)(i)	DEFECTS AND NONCOM	PLIANCE	PART 21/50.55 REACTORS	EM/	٩IL

PART 21 - ANOMALY RELATED TO MICRO SWITCHES

The following report was received via email:

"Based on test data, Rotork believes an unsafe condition may exist as defined under 10 CFR 21. The adhesive formulation used for the construction of V12 and K5 safety related micro switches was altered by the switch maker's sub-supplier. K5 switches have no reported failures, but are affected because of construction. The altered adhesive formulation outgases an insulating material at elevated temperatures, which coats the switch contacts as it cools and can prevent the conduction of electricity."

* * * UPDATE AT 0938 EDT ON 10/31/16 FROM PATRICK A. SHAW TO S. SANDIN VIA FAX * * *

"This letter provides an update to the Rotork Controls Inc. Part 21 filing submitted May 4th 2016; documented in U.S.NRC Event Number 51907.

"Rotork have developed versions of the V12 & K5 switches that eliminate adhesive from the materials of construction.

"Evaluation of pre-production V12 switches, by thermal aging for 10 days at 125°C (257F), demonstrate the switch non-metallic housing and plunger also outgas materials that contributed to the accumulated contamination observed on switch electrical contacts as reported in Event 51907. The cause of the new outgassing sources and extent of condition is currently being investigated. For the moment suitable replacement switches remain unavailable that correct the issue reported in Event 51907.

"At this point in time. Rotork do not have grounds to believe the extent of condition is altered from that reported in

IE19 NRK

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Page 2

Event Number 51907."

Notified R1DO (Schroeder), R2DO (Guthrie), R3DO (Daley), R4DO (Vasquez) and PART 21/50.55 REACTORS via email.



rotork Controls

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tel: +1 585 247 2304 fax: +1 585 247 2308 www.rotork.com info@rotork.com

#002

To: NRC	Operation	2 Center	From:	Pabrick	A Show	
•	1) 816 - 51		Pagos:	(Including Co	ver Page) Z_	
Phone: (4	(85) 770-	1019	Date:	10/31/20	0/6	
Re:			CC:		** ** ********************************	TMV == -
□ Urgent	☐ For Review	□ Please Com	lment 🏻 F	lease Reply	□ Please Recyclo	e
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U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001

From: Patrick A. Shaw, P.E
To: NRC Operations Center
Date: October 31st 2016

Subject: Update to U.S.NRC Event Number 51907

Dear Sir/Madame,

This letter provides an update to the Rotork Controls Inc. Part 21 filing submitted May 4th 2016; documented in U.S.NRC Event Number 51907.

Rotork have developed versions of the V12 & K5 switches that climinate adhesive from the materials of construction.

Evaluation of pre-production V12 switches, by thermal aging for 10 days at 125°C (257F), demonstrate the switch non-metallic housing and plunger also outgas materials that contributed to the accumulated contamination observed on switch electrical contacts as reported in Event 51907. The cause of the new outgassing sources and extent of condition is currently being investigated.

For the moment suitable replacement switches remain unavailable that correct the issue reported in Event 51907.

At this point in time, Rotork do not have grounds to believe the extent of condition is altered from that reported in Event Number 51907.

Sincerely

Patrick A. Shaw, P.E

Quality Assurance Manager

Tel (585) 770-1019

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