

Part 21 (PAR)

Event # 51243

<b>Rep Org:</b> UNITED CONTROLS INTERNATIONAL		<b>Notification Date / Time:</b> 07/20/2015 16:48 (EDT)	
<b>Supplier:</b> UNITED CONTROLS INTERNATIONAL		<b>Event Date / Time:</b> 06/03/2015 (EDT)	
		<b>Last Modification:</b> 07/20/2015	
<b>Region:</b> 1	<b>Docket #:</b>		
<b>City:</b> NORCROSS	<b>Agreement State:</b>	Yes	
<b>County:</b>	<b>License #:</b>		
<b>State:</b> GA			
<b>NRC Notified by:</b> WILLIAM MALLIA		<b>Notifications:</b> MICHAEL F. KING	R2DO
<b>HQ Ops Officer:</b> JEFF HERRERA		HEATHER GEPFORD	R4DO
<b>Emergency Class:</b> NON EMERGENCY		PART 21/50.55 REACTORS	EMAIL
<b>10 CFR Section:</b>			
21.21(a)(2) INTERIM EVAL OF DEVIATION			

## POTENTIAL PART 21 - ALLEN BRADLEY FAILURE TO DOCUMENT DESIGN CHANGE

The following information is excerpted from an email received from United Controls International:

"[In] August 2014, United Controls supplied four (4) time delay relays to Omaha Public Power-Fort Calhoun Station. The subject relay was qualified in accordance with IEEE 323-74/83, IEEE 344-1975/1987 and IEEE C37.98-1987, for use in mild environment safety related applications.

"Per NRC Part 21 notifications, UCI was informed that the Allen Bradley relays base model 700RTC contain a Complex Programmable Logic Device (CPLD) which was unpublished. This design change could not be noticed since the external appearance of the relay and the relay part number remained the same. Hence, UCI has qualified the subject relay as solid state relay whereas the presence of the CPLD device elects the item as a digital device which can be affected by EMI/RFI noises.

"At this time, UCI has no sufficient information to determine whether this design change would create a Substantial Safety Hazard as it relates to the plant applications for the subject relay.

"Per the Nutherm Part 21 ML 15161A230, Allen Bradley has indicated that a rolling change occurred from mid-2009 with no specific manufacturing date to distinguish between the old and the new configuration. Hence, all units manufactured during 2009 and later are suspect.

"If you have any questions or wish to discuss this matter or this report, please contact:

"Jim Garrison  
"Engineering Manager

IE19  
NRR

07/21/2015

"jgarrison@unitedcontrols.com"  
"770-496-1406 x 103"

Affected facility: Omaha Public Power-Fort Calhoun Station  
Part Number: 700-RTC-11200U1  
Quantity: 4

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**UCI  
DATA TRANSMITTAL**

<b>DATE:</b>	July 20, 2015		
<b>TO:</b>	NRC OPERATIONS CENTER	<b>FROM:</b>	William Mallia/UCI
<b>FAX:</b>	301-816-5151	<b>FAX:</b>	770-496-1422
<b>EMAIL:</b>	HOO.HOC@NRC.GOV	<b>EMAIL:</b>	wmallia@unitedcontrols.com
<b>TEL:</b>	301-816-5100	<b>TEL:</b>	770-496-1406 x 148
<b>CC:</b>	Interim letter	<b>PAGES:</b>	4 pages with cover page

**COMMENTS:**

**PLEASE SEND A MESSAGE OF RECEIPT TO VERIFY THAT THE  
EMAIL TRANSMITTAL HAS BEEN RECEIVED.**

**THANK YOU,**

**WILLIAM MALLIA**



## 10CFR21 INTERIM LETTER

July 20, 2015

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

Subject: Report of Potential Part 21 on Allen Bradley Time Delay Relay 700-RTC-11200U1.

The purpose of this letter is to provide the NRC with a report in general conformity of the requirements of 10CFR Part 21.21. On August 2014, United Controls supplied four (4) time delay relays to Omaha Public Power – Fort Calhoun Station. The subject relay was qualified in accordance with IEEE 323-74/83, IEEE 344-1975/1987 and IEEE C37.98-1987, for use in mild environment safety related applications.

Per NRC Part 21 notifications, UCI was informed that the Allen Bradley relays base model 700RTC contain a Complex Programmable Logic Device (CPLD) which was unpublished. This design change could not be noticed since the external appearance of the relay and the relay part number remained the same. Hence, UCI has qualified the subject relay as solid state relay whereas the presence of the CPLD device elects the item as a digital device which can be affected by EMI/RFI noises.

At this time, UCI has no sufficient information to determine whether this design change would create a Substantial Safety Hazard as it relates to the plant applications for the subject relay.

Required information as per 10CFR Part 21.21(d)(4) follows:

**(i) Name and Address of the individual or individuals informing the Commission**  
**Rob Hale**

President  
United Controls International  
205 Scientific Drive  
Norcross, GA 30092

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

The item was supplied to Omaha Public Power-Fort Calhoun Station under Purchase Order 00205846.



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

United Controls International  
205 Scientific Drive  
Norcross, GA 30092

- (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.***

Allen Bradley made an unpublished design change by adding a CPLD device which by nature is a digital device but failed to document this design change. The part number and the outer appearance of the relay remain unchanged which is not indicative of any difference in internal configuration. Per the Nutherm Part 21 ML 15161A230, Allen Bradley has indicated that a rolling change occurred from mid-2009 with no specific manufacturing date to distinguish between the old and the new configuration. Hence, all units manufactured during 2009 and later are suspect. UCI has no sufficient information for determining whether this condition could lead to substantial safety hazard as it relates to the plant applications for the subject 700RTC time delay relay.

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

This information was initially obtained on June 3, 2015.

- (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.***

Part number	Utility	Purchase Order	Quantity
700-RTC-11200U1	OPPD- Fort Calhoun Station	00205846	4

- (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.***

At this time, UCI does not have sufficient information for determining whether this condition would have created Substantial Safety Hazard as it relates to the plant application (s) for this relay. OPPD is responsible for evaluating the condition and for determining the necessary corrective actions.

- (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.***

EMI/RFI tests need to be performed on the relay.



- (ix) *In the case of an early site permit, the entities to whom an early site permit was transferred.*  
Not Applicable.

If you have any questions or wish to discuss this matter or this report, please contact:

Jim Garrison  
Engineering Manager  
jgarrison@unitedcontrols.com  
770-496-1406 x 103

Sincerely,

A handwritten signature in black ink that reads "Rob Hale". The signature is written in a cursive style with a large, sweeping initial "R".

Rob Hale  
President  
United Controls International