Part 21 (PAR)

Event #

52427

Rep Org: TE CONNECTIVITY

Notification Date / Time: 12/13/2016 16:08

Supplier: TE CONNECTIVITY

Event Date / Time: 12/09/2016

(EST) (EST)

Last Modification: 12/13/2016

Region: 1

City: FAIRVIEW

Docket #:

License #:

**Agreement State:** 

Yes

County:

State: NC

Notifications: DAN SCHROEDER

R1DO

NRC Notified by: OSWALDO VARGAS **HQ Ops Officer:** HOWIE CROUCH

ERIC MICHEL

R2DO

**Emergency Class: NON EMERGENCY** 

JAMNES CAMERON **RAY KELLAR** 

R3DO R4DO

10 CFR Section: 21.21(a)(2)

INTERIM EVAL OF DEVIATION

PART 21/50.55 REACTORS

**EMAIL** 

## PART 21 NOTIFICATION - DEFECTIVE SAFETY-RELATED RELAYS SUPPLIED BY TE CONNECTIVITY

The following information is a summary of a letter of nonconformance submitted by TE Connectivity:

Limerick Generating Station reported that four TE Connectivity supplied relays failed power labs analysis. The relays are TE part number 1-1431775, ETR14I3D004. The affected relays appear to be those in date code ranges 1604 and 1612.

The preliminary evaluation revealed an incorrect orientation of one capacitor installed on the printed circuit board.

The relays were purchased by Curtiss-Wright (8 relays), Limerick Generating Station (8 relays) and NextEra (2 relays).

An investigation is ongoing.

Point of Contact:

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IE19 NRR



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Date: 12 December 2016

To: Operation Center

United States Nuclear Regulatory Commission (NRC)

Fax: (301)816-5151

Subject:

TE Connectivity – Part 21 Transfer of Information – TE-022

The intent of this letter is to inform the NRC of an issue noted with a TE Connectivity relay.

Exelon- Limerick Power Station reported that during normal continuously energized operation. four nuclear relays, TE part number 1-1423177-5, ETR14l3D004 failed Exelon Power Labs Analysis. Potential Suspect Date Code Range is 1604 and 1612.

Current investigation is now active under TE reference number 1353162. To help with the investigation, samples of the product were sent to our Manufacturing facility in the original TE assembled condition, including all component parts. The preliminary evaluation revealed an incorrect orientation of one capacitor installed on the printed circuit board (PCB). Attachment 1 contains list of shipments for 2016.

If you have any questions or require any additional information, please contact us by email or at the number listed above.

Sincerely.

Quality Manager

## Attachment 1

Date Customer	Part Number	Description	Factory Order	P.O.#	Sales order# C	ŧΤγ
1/20/2016 Curtiss-Wright	1-1428177-5	ETR1413d004	211294948	CP00009336	3041699021	8
1/30/2016 Exelon/Umerick	1-1423177-5	ETR14134004	21,1700251	90080949	3042553782	4
3/22/2016 Exelon /Limerick	1-1423177-5	ETR1419d004	212073111	90083110	3043380101	3
8/29/2016 Exelon (Limerick	1-14231,77-5	ETR14136004	212073111	90083110	3043380101	1.
8/25/2016 Nextera	1-1423177-5	ETR1413d004	212949408	0235712 /REV001	2045281688	2

## Attachment 2 Transfer of Information per Part 21,21 (b)

(i) Name and address of the individual providing the information:

Oswaldo R Vargas, Quality Manager, TE Connectivity, Aerospace Defense and Marine Division, 1396 Charlotte Highway, Fairview, NC USA 28730.

(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity that contains a deviation or failure to comply;

Items supplied are TE part number 1-1423177-5, ETR14l3D004. Potential Suspect Date Code Range is1604 and 1612.

TE Connectivity sold this safety-related item for specified and unspecified applications. See Attachment 1.

(iii) Identification of the firm constructing the facility or supplying the basic component that contains a deviation or a failure to comply:

TE Connectivity, 1396 Charlotte Highway, Fairview NC, USA 28730

(iv) Nature of the defect or safety hazard that could be created by such a deviation or failure to comply:

Intermittent operation of connected equipment under load.

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

TE Connectivity made the determination of the existence of this condition in 9 December 2016.

(vi) In case of a basic component, which contains a deviation or failure to comply, the locations of all such components in use or being supplied?

Customers that purchased affected safety-related items from TE Connectivity for applications are identified in Attachment 1.

(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 (note, these are actions specifically associated with the identified deviation or failure to comply:

At this time, product has been put on hold until the investigation is complete.

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

TE Connectivity does not have sufficient information to perform an evaluation for unspecified applications.