

General Information or Other (PAR)

Event # 45776

Rep Org: WESTINGHOUSE ELECTRIC COMPANY	Notification Date / Time: 03/19/2010 08:37 (EDT)
Supplier: WESTINGHOUSE ELECTRIC COMPANY	Event Date / Time: 03/18/2010 (EDT)
	Last Modification: 03/19/2010
Region: 1	Docket #:
City: PITTSBURG	Agreement State: Yes
County:	License #:
State: PA	
NRC Notified by: JAMES A. GRESHAM	Notifications: WAYNE WALKER R4DO
HQ Ops Officer: DONG HWA PARK	JOHN THORP NRR DA
Emergency Class: NON EMERGENCY	BILL GOTT IRD
10 CFR Section:	PART 21 GROUP Email
21.21 UNSPECIFIED PARAGRAPH	

DEFECT CONCERNING FAILURE OF RELAY TO RELEASE WHEN DE-ENERGIZED

The following was received via facsimile:

The defect prevents the relay contacts from changing state when required during postulated events. This failure could preclude components from going to their desired accident state upon receipt of an engineered safety features actuation signal. There have been no reports to date of relay contacts failing to properly change state when the relay goes from a deenergized to an energized state. Westinghouse shipped Palo Verde a total of 120 Cutler Hammer Type ARD 660UR DC Relays. Westinghouse Repair, Replacement and Automation Services (RRAS) has been working with Palo Verde and Eaton-Cutler Hammer to identify and correct the cause of these relay failures.

POC: J. A. Gresham, Secretary
Safety Review Committee
Westinghouse Electric Company LLC
Nuclear Services
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
(412) 374-4643

IE 19
NRR



Westinghouse

Fax

To: *NRC*

Date: *19 March 2010*

FAX *301 - 816 - 5151*

Your ref:

From: *Westinghouse - James Gisham*

Our ref: *LTR-NRC-10-20*

TEL: *412 - 302 - 6103*

3-19-2010

E-Fax:

e-mail:

Subject: *Part 21 NOTIFICATION! CUTLER-HAMMER ANDGOUR
Relays*



Westinghouse

Westinghouse Electric Company
Nuclear Services
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
USA

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

Direct tel: (412) 374-4643
Direct fax: (412) 374-3846
e-mail: greshaja@westinghouse.com

Our ref: LTR-NRC-10-20

March 19, 2010

Subject: Notification of a Defect Pursuant to 10CFR21

The following information is provided pursuant to the requirements to 10 CFR 21 to report a defect. This issue concerns the failure of an Eaton-Cutler Hammer Type ARD660UR DC Relay to Release When De-Energized

- (i) Name and address of the individual or individuals informing the Commission.
J. A. Gresham
Westinghouse Electric Company LLC
Nuclear Services
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
- (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 basic component is an Eaton-Cutler Hammer Type ARD 660UR DC Relay.
- (iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.
Westinghouse Electric Company LLC
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
- (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.

The Defect is prevention of the relay contacts from changing state when required to do so during postulated events and/or surveillance testing, caused by the crossbar in the relay not moving as required for proper operation of the relay. This failure could preclude components from going to their desired accident state upon receipt of an engineered safety features actuation signal. Note that there have been no reports to

date of relay contacts failing to properly change state when the relay goes from a de-energized to an energized state.

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

The Westinghouse president was informed of this issue March 18, 2010.

- (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.

Westinghouse shipped Palo Verde a total of 120 of the subject Cutler Hammer Type ARD 660UR DC Relays. These relays were procured via five (5) separate purchase orders, dated between December 11, 2008 and July 1, 2009. Some of these relays are installed in systems where relay failure could result in one or both trains of safety related functions being unable to fulfill their safety related design function.

- (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.

Westinghouse Repair, Replacement and Automation Services (RRAS) has been working with Palo Verde and Eaton-Cutler Hammer to identify and correct the cause of these relay failures. Westinghouse RRAS is revising its commercial grade dedication process for these relays. This action ensures that the commercial grade dedication criteria include additional physical characteristics concerning the relay cross bar which are verified before future batches of relays are shipped to the customer as safety related components.

Cutler Hammer plans to ship an initial batch of twenty five (25) replacement relays to Westinghouse for commercial grade dedication. Westinghouse expects to complete commercial grade dedication of these 25 relays by March 26, 2010. Following commercial grade dedication, relays meeting the commercial grade dedication acceptance criteria will be shipped to Palo Verde.

Cutler Hammer will ship a second batch of thirty two (32) replacement relays to Westinghouse for commercial grade dedication after shipping the first batch of relays discussed above. Westinghouse expects to complete commercial grade dedication of these 32 relays by April 2, 2010. Following commercial grade dedication, relays meeting the commercial grade dedication acceptance criteria will be shipped to Palo Verde.

Cutler Hammer will ship the remainder of the required relays (some for operating components not addressed in the previous relay manufacturing batches, some for currently dedicated relays kept in the Palo Verde warehouse) by early to mid April 2010. Following approximately a week for commercial grade dedication by Westinghouse, the remaining relays meeting the commercial grade dedication acceptance criteria will be shipped to Palo Verde.

- (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.

Westinghouse has been in discussions with Eaton-Cutler Hammer and Palo Verde personnel regarding this issue. Palo Verde is knowledgeable about planned Westinghouse and Eaton-Cutler Hammer actions to supply the plant with new Eaton-Cutler Hammer Type ARD 660UR DC Relays. Westinghouse has advised Palo Verde that replacement preference should be given to relays that are normally energized and are then de-energized to perform their safety function since there has not been a reported instance of relay contacts not properly changing state when energizing.

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

N/A

Very truly yours,

J. A. Gresham, Secretary
Westinghouse Safety Review Committee

cc: E. Lenning (NRC MSO-11-F1)