

# CATEGORY 1

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9905280047    DOC.DATE: 99/05/17    NOTARIZED: NO    DOCKET #  
 FACIL:50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G    05000244  
 AUTH.NAME    AUTHOR AFFILIATION  
 WIDAY,J.A.    Rochester Gas & Electric Corp.  
 RECIP.NAME    RECIPIENT AFFILIATION  
                   NRC - No Detailed Affiliation Given

SUBJECT: Part 21 rept re relay deficiency detected during  
 pre-installation testing.Caused by incorrectly wired relay  
 coil.Relays were returned to Eaton Corp for investigation.  
 Relays were repaired & retested.

DISTRIBUTION CODE: IE28T    COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 5  
 TITLE: Licensee Event Report (LER) & Part 21 Rept Combination (50 Dkt)

NOTES:License Exp date in accordance with 10CFR2,2.109(9/19/72).    05000244

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RGN 3	1    1	RGN 4	1    1
RGN1    FILE    01	1    1		
EXTERNAL: INPO RECORD CTR	1    1	L ST LOBBY WARD	1    1
LITCO STUART,VA	1    1	NOAC MAYS,G	1    1
NOAC QUEENER,D	1    1	NRC PDR	1    1
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ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001  
AREA CODE 716-546-2700



May 17, 1999

U.S. Nuclear Regulatory Commission  
Operations Center  
Facsimile Number 301-816-5151  
Telephone Number 301-816-5100

Subject: Initial Notification of 10 CFR Part 21 Defect  
R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

The enclosed initial notification is provided in accordance with 10 CFR Part 21, Reporting of Defects and Noncompliance, Section 21 (d) (3) (i), which requires "Initial notification by facsimile". Written notification, in accordance with 10 CFR Part 21, Section 21 (d) (3) (ii), will be provided by June 16, 1999.

Very truly yours,

*Joseph A. Widay*  
Joseph A. Widay

Enclosures

9905280047 990517  
PDR ADOCK 05000244  
S PDR

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## 10CFR21 INITIAL FACSIMILE NOTIFICATION

**I. NAME AND ADDRESS OF THE INDIVIDUAL INFORMING THE COMMISSION:**

NAME: Joseph A. Widay  
Plant Manager

ADDRESS: Rochester Gas & Electric Corporation  
89 East Avenue  
Rochester, New York 14649

**II. IDENTIFICATION OF THE FACILITY, THE ACTIVITY, OR THE BASIC COMPONENT SUPPLIED FOR SUCH FACILITY WHICH FAILS TO COMPLY OR CONTAINS A DEFECT:**

The basic component is the Nbfd65nr Control Relay, supplied by EATON Corporation, Inc. This component was purchased safety related for use in various locations at Ginna Station.

**III. IDENTIFICATION OF THE FIRM CONSTRUCTING THE FACILITY OR SUPPLYING THE BASIC COMPONENT WHICH FAILS TO COMPLY OR CONTAINS A DEFECT:**

The Relays were supplied to RG&E by EATON Corporation

EATON Corporation Inc.  
21 South St  
Danbury, Ct 06810

**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 nature of the defect consisted of a manufacturing deficiency. Upon investigation, by EATON, it was determined that the relay coil had been incorrectly wired such that the internal relay design, which includes a pick up and a hold coil, would oppose each other at lower voltages and prohibit holding coil actuation which resulted in excessive relay chatter. The incorrect wiring was attributed to insufficient training and subsequent poor workmanship of a new employee. The factory testing did not detect the chattering relays.

The deficiency was detected by RG&E during pre-installation testing prior to installation into reactor trip logic. No actual safety hazard existed.



V. THE DATE ON WHICH THE INFORMATION OF SUCH DEFECT OR FAILURE TO COMPLY WAS OBTAINED:

The information was obtained on April 2, 1999, during the pre-installation testing of the relays.

VI. IN THE CASE OF A BASIC COMPONENT WHICH CONTAINS A DEFECT OR FAILS TO COMPLY, THE NUMBER AND LOCATION OF ALL SUCH COMPONENTS IN USE AT, SUPPLIED FOR, OR BEING SUPPLIED FOR GINNA STATION:

There are numerous NBFD65NR relays, permanently installed at Ginna Station. None of the deficient relays were installed.

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:

After the deficiency was discovered by RG&E, the relays were returned to EATON for evaluation and root cause analysis. An RG&E QA Engineer was present during the root cause investigation. At EATON's factory, it was discovered that one of the two relay coils was wired up backwards on all the relays in question. The relays were tested by EATON and passed their bench test, but the factory noise masked the sound of the relays chattering.

The relays were repaired and retested using enhanced test procedures which included checking for relay chatter.

RG&E has changed their vendor requirements to include Source Surveillance on future orders with EATON. RG&E will perform receipt testing of relays purchased from EATON.

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:

RG&E's advice would be to perform receipt inspection testing of relays or perform a source surveillance of the vendor's testing practices.



# ROCHESTER GAS AND ELECTRIC CORPORATION

R.E. GINNA NUCLEAR POWER PLANT

*Ginna Administration*

1503 Lake Road

Ontario, NY 14519

Contact Name:	USNRC
Company Name:	
Telecopy Number:	301-816-5151

Sender:	Joseph A. Widay
Description:	

Number of pages, including cover sheet:	4
Date Sent:	5-18-99

If you have not received all pages, or if you have any questions or problems with receiving, contact:	
Sharon Sortino or Wendy Merkel	
Verification Number:	716-771-3548 or 716-771-3102
Telecopy Number:	716-771-3943

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05/18/1999

U.S. Nuclear Regulatory Commission Operations Center Event Report

Page 1

Power Reactor

Event # 35731

Site: GINNA		Notification Date / Time: 05/18/1999 12:47 (EDT)	
Unit: 1	Region: 1	State : NY	Event Date / Time: 05/18/1999 (EDT)
Reactor Type: [1] W-2-LP		Last Modification: 05/18/1999	
Containment Type: DRY AMB			
NRC Notified by: JOSEPH A. WIDAY (VIA F		Notifications: PETER ESELGROTH R1	
HQ Ops Officer: STEVE SANDIN		VERN HODGE NRR	
Emergency Class: NON EMERGENCY			
10 CFR Section:			
21.21		UNSPECIFIED PARAGRAPH	

Unit	Scram Code	RX Crit	Init Power	Initial RX Mode	Curr Power	Current RX Mode
1	N	Yes	98	Power Operation	98	Power Operation

DEFICIENT CONTROL RELAYS IDENTIFIED DURING PRE-INSTALLATION TESTING.

ON 4/2/99, THE LICENSEE IDENTIFIED THAT CONTROL RELAYS (NBFD65NR) MANUFACTURED BY EATON CORPORATION CONTAINED A MANUFACTURING DEFICIENCY, I.E., "THE RELAY COIL HAD BEEN INCORRECTLY WIRED SUCH THAT THE INTERNAL RELAY DESIGN, WHICH INCLUDES A PICK UP AND A HOLD COIL, WOULD OPPOSE EACH OTHER AT LOWER VOLTAGES AND PROHIBIT HOLDING COIL ACTUATION WHICH RESULTED IN EXCESSIVE RELAY CHATTER." THIS DEFECT WAS IDENTIFIED DURING PRE-INSTALLATION TESTING PRIOR TO USE IN THE REACTOR TRIP LOGIC. NO DEFICIENT RELAYS ARE INSTALLED.

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AREA CODE 716-546-2700



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