



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001

[P2]-98-02-21  
Koshy



AREA CODE 716 546-2700

ROBERT C. MECREDDY  
Vice President  
Nuclear Operations

MR 98-02-01

January 15, 1998

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Attn: Guy S. Vissing  
Project Directorate I-1  
Washington, D.C. 20555

Subject: 10 CFR Part 21 30 Day Report  
R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

Dear Mr. Vissing:

In accordance with 10 CFR Part 21, Reporting of Defects and Noncompliance, Section 21 (d) (3) (ii), which requires "Written notification to the NRC ... on the identification of a defect or a failure to comply", the attached 10 CFR 21 report is hereby submitted.

Very truly yours,

*Robert C. Mecreddy*  
Robert C. Mecreddy

xc: Mr. Guy S. Vissing (Mail Stop 14B2)  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

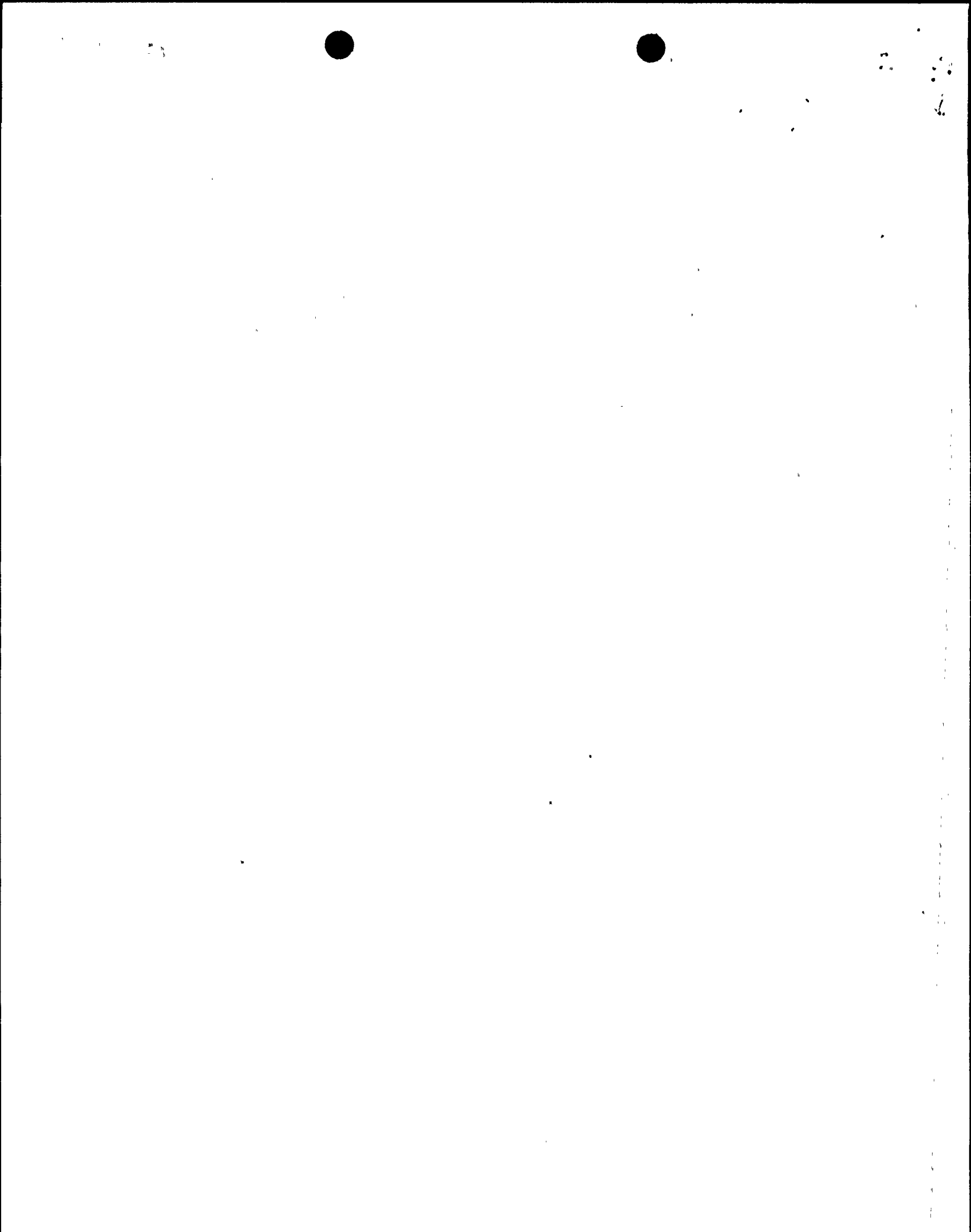
Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

U.S. NRC Ginna Senior Resident Inspector

IE1911

9801220365 980115  
PDR ADOCK 05000244  
S PDR





## 10CFR21 30 DAY WRITTEN REPORT

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

NAME: Robert C. Mecredy  
Vice President Nuclear Operations Group

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 facility is the R. E. Ginna Nuclear Power Plant. The basic component is the shunt trip assembly on the "B" Emergency Diesel Generator (EDG) Supply Breaker to Bus 16. This breaker is a Westinghouse DB-75 air circuit breaker and the Ginna equipment identification number is EIN 52/EG1B1. The shunt trip assembly was installed on this breaker in May, 1995, using spare parts purchased in 1977.

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

The shunt trip assembly was supplied by:

Westinghouse Electric Corporation  
Power Systems  
Switchgear Division  
700 Braddock Avenue  
East Pittsburgh, PA 15112

## 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 shunt trip coil plunger is part of the shunt trip and alarm switch assembly. The plunger of the shunt trip assembly was binding in the shunt trip coil. When activated, the breaker's shunt trip coil plunger pulls the breaker tripper bar to trip the breaker. The bound plunger was not returning to its deenergized position. The breaker tripper bar was being maintained in the trip free position, preventing the DB-75 air circuit breaker from closing.



4

Testing of the "B" EDG Supply Breaker to Bus 16 was performed in November, 1997, during the 1997 outage. During this testing, the breaker failed to close. The breaker could not be closed electrically or manually, because the shunt trip coil plunger was maintaining the tripper bar in the trip free position. This failure would prevent the "B" EDG from supplying power to the safeguards loads on Bus 16. This is considered a major degradation since, in conjunction with a single failure on the redundant train, required safety functions could not be performed.

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

The information was obtained during testing performed on November 14, 1997.

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 six Westinghouse DB-75 breakers permanently installed at Ginna Station, in safeguards buses 14 and 16. One of these breakers is manually operated and the shunt trip coil is not used. In addition, there is one spare DB-75 breaker in stock. With the exception of the 52/EG1B1 breaker, these breakers still have their original shunt trip assemblies installed. The 52/EG1B1 breaker is the only DB-75 breaker that has had the shunt trip assembly replaced. The replacement shunt trip assembly that failed was one of ten purchased in 1977 as spares.

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:

Corrective action is complete. The failed shunt trip assembly was replaced with a spare from stock. The assembly was manually and electrically bench tested prior to being returned to operable status.

The remaining eight assemblies in stock were inspected. Two assemblies had coil plungers that did not fully return to the deenergized position during manual manipulation. These were removed from stock.

The other DB-75 breakers were visually inspected. Acceptable plunger movement is indicated by adequate plunger to tripper bar gap and full retraction of the alarm switch attachment push rod. No additional binding concerns were found.

The Procurement Analysis Form (PAF) for the shunt trip assembly was appended. Prior to reordering, the PAF now requires the addition of plunger movement verification to the assembly acceptance plan.

Westinghouse was contacted. There have been no other reported events of this nature that Westinghouse is aware of. A check of industry operational events did not identify similar breaker failure.

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:

Receipt inspection could verify acceptable plunger movement. During DB-75 breaker maintenance, consider verifying that the shunt trip coil plunger moves freely in the coil by verifying adequate plunger to tripper bar gap and full retraction of the alarm switch attachment push rod.

P21-98-01-0  
Koshy

GENERAL INFORMATION or OTHER

EVENT NUMBER: 33442

LICENSEE: ROCHESTER GAS & ELECTRIC CORP  
CITY: ROCHESTER REGION: 1  
COUNTY: STATE: NY  
LICENSE#: AGREEMENT: Y  
DOCKET:

NOTIFICATION DATE: 12/22/97  
NOTIFICATION TIME: 09:10 [ET]  
EVENT DATE: 11/14/97  
EVENT TIME: 12:00 [EST]  
LAST UPDATE DATE: 12/22/97

NOTIFICATIONS

JAMES NOGGLE RDO

JERRY CARTER NRR

NRC NOTIFIED BY: JOHN ST. MARTEN  
HQ OPS OFFICER: DOUG WEAVER

EMERGENCY CLASS: NOT APPLICABLE  
10 CFR SECTION:  
CCCC 21.21 UNSPECIFIED PARAGRAPH

EVENT TEXT

PART 21 - DEFECTIVE SHUNT TRIP COILS

THE LICENSEE DISCOVERED A WESTINGHOUSE DB-75 BREAKER THAT WAS FAILING TO CLOSE AT THEIR GINNA PLANT. THE PLUNGER OF THE SHUNT TRIP COIL ASSEMBLY WAS BINDING, MAINTAINING THE BREAKER TRIPPER BAR IN THE TRIP FREE POSITION. THE LICENSEE HAS SEVEN DB-75 BREAKERS ON SITE, ONLY ONE HAD THE PROBLEM DESCRIBED. THE BREAKER WITH THE FAILED SHUNT TRIP COIL IS THE ONLY ONE TO HAVE HAD THAT PART PREVIOUSLY REPLACED. THE REPLACEMENT SHUNT TRIP COIL THAT FAILED WAS ONE OF TEN PURCHASED IN 1977 AS SPARES.

THE FAILED SHUNT TRIP COIL WAS REPLACED WITH A SPARE FROM STOCK. THE REMAINING EIGHT ASSEMBLIES IN STOCK WERE INSPECTED. TWO ASSEMBLIES HAD COIL PLUNGERS THAT DID NOT FULLY RETURN TO THE DEENERGIZED POSITION DURING MANUAL MANIPULATION. THESE WERE REMOVED FROM STOCK.

LICENSEE RECOMMENDS RECEIPT INSPECTION TO VERIFY ACCEPTABLE PLUNGER MOVEMENT AND ALSO VERIFYING THAT THE SHUNT TRIP COIL PLUNGER MOVES FREELY IN THE COIL ASSEMBLY DURING BREAKER MAINTENANCE.

Prob  
2/8

Visiting  
1441

