

12/01/2003

U.S. Nuclear Regulatory Commission Operations Center Event Report

Page 1

Power Reactor

Event # 40364

|                                |                       |  |                                     |                 |            |                 |
|--------------------------------|-----------------------|--|-------------------------------------|-----------------|------------|-----------------|
| Site: <u>SUMMER</u>            |                       | Notification Date / Time: 12/01/2003 14:37 (EST) |                                     |                 |            |                 |
| Unit: 1                        | Region: 2             | State : SC                                       | Event Date / Time: 10/03/2003 (EST) |                 |            |                 |
| Reactor Type: [1] W-3-LP       |                       | Last Modification: 12/01/2003                    |                                     |                 |            |                 |
| Containment Type: DRY AMB      |                       |  |                                     |                 |            |                 |
| NRC Notified by: JEFF PEASE    |                       | Notifications: BRIAN BONSER R2                   |                                     |                 |            |                 |
| HQ Ops Officer: JEFF ROTTON    |                       | WILLIAM BECKNER NRR                              |                                     |                 |            |                 |
| Emergency Class: NON EMERGENCY |                       | RICHARD CONTE R1                                 |                                     |                 |            |                 |
| 10 CFR Section:                |                       | BRUCE BURGESS R3                                 |                                     |                 |            |                 |
| 21.21                          | UNSPECIFIED PARAGRAPH | CLAUDE JOHNSON R4                                |                                     |                 |            |                 |
|                                |                       | JACK FOSTER NRR                                  |                                     |                 |            |                 |
| Unit                           | Scram Code            | RX Crit  | Init Power                          | Initial RX Mode | Curr Power | Current RX Mode |
| 1                              | N                     | Yes  | 100                                 | Power Operation | 100        | Power Operation |

NONCOMFORMANCE NOTIFICATION FOR SOLID STATE PROTECTION MASTER RELAY

Failure of Master Relay K507 (MidTex Part Number 15614D200) in the Solid State Protection System (SSPS) was attributed to corrosion caused by off-gassing of chlorine contamination from paper used to wrap the relay coil, or the adhesive used to attach the paper wrap to the coil. Master Relays must change state, upon energization, to actuate various safety related equipment in the plant. The failure of Master Relay K507 is considered to be a manufacturing defect in a basic component that could cause a loss of safety function.

The majority of MidTex relays investigated had cloth wrapped coils and these relays showed no evidence of corrosion.

The number of affected relays and installed locations was not available at the time of the initial notification.

The licensee will notify the NRC Resident Inspector.

JE19

SAP-1165  
ATTACHMENT I  
REVISION 1  
PAGE 1 OF 1

- SUBSTANTIAL SAFETY HAZARD (SSH) EVALUATION TRACKING SHEET  
\* (TO BE COMPLETED WITHIN 60 DAYS OF INITIAL DISCOVERY)

## 1. GENERAL INFORMATION

Tracking Sheet Initiation Date 11/26/03Number 03-0003 Discovery Date 10/03/03 \* 60 Day Due Date 12/02/03Reviewer M. G. HicksTopic Failure of SSPS Master Relay (MidTex P/N 156-14D200) due to chlorine based corrosionHow was topic first identified? NCN 03-3099

List correspondence, documents, telecons applicable to the determination of the SSH \*\* NCN 03-3099, Pentas Controls, Inc., FAL No. 069, Root Cause of Failure Analysis for Mid-Tex 156-14D200 Relays, dated 11/20/03

## 2. \* DISPOSITION

Determined to be an SSH, reportable per 10CFR21: ☒ YES ☐ NO

Discussion/Justification: \*\* SSPS Master Relays must change state, upon energization, to actuate various safety related equipment in the plant. The Pentas Controls failure report referenced above attributes the failure of Master Relay K507 corrosion caused by off-gassing of chlorine contamination from paper used to wrap the relay coil, or the adhesive used to attach the paper wrap to the coil. Another MidTex P/N 156-14D200 relay with a paper wrapped coil, sent to Pentas for follow-up analysis, showed evidence of the same type of corrosion. Therefore, the failure of Master Relay K507 is considered to be a manufacturing defect in a basic component that could cause a loss of safety function.

This report is applicable only to MidTex relays with paper wrapped coils. The majority of MidTex relays investigated had cloth wrapped coils, and these relays showed no evidence of corrosion.

Signatures: Reviewer M. G. HicksDate 11/26/03# Functional Manager W. O. [Signature]Date 11/26/03# Manager, NL R. B. [Signature]Date 12/1/03

# Determined not to be an SSH (attach a statement of justification)

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

## 3. Determined to be reportable per 10CFR21 by SVPNO:

5-Day Limit Due Date 12/6/03# SVPNO Signature [Signature]Date 12/1/03Time 1318

## 4. NRC Informed - 2 Day Notification Of The Substantial Safety Hazard

Due Date 12/3/03Notified by SCE&G (Name) Jeff PeaseNRC (Name) Jeff RottonDate 12-1-03Time 1437NRC (Title) HQ operations officerApplicable Correspondence \*\* EN 40364

## 5. NRC Informed - 30 Day Report of the Substantial Safety Hazard

Due Date \_\_\_\_\_

Letter to NRC \_\_\_\_\_

Dated \_\_\_\_\_

Applicable Correspondence \*\* \_\_\_\_\_

## 6. Program Tracking Document (e.g., CER, ECR, Etc.) \*\* \_\_\_\_\_

## 7. Closeout

Manager, NL: Signature \_\_\_\_\_

Date \_\_\_\_\_

Closed in RTS: Signature \_\_\_\_\_

Date \_\_\_\_\_

Transmitted to Records: Signature \_\_\_\_\_

Date \_\_\_\_\_

\* If the evaluation cannot be completed, an interim report must be submitted to the NRC by the 60 Day Due Date.

\*\* Attach additional pages, TWRs, or other documentation as necessary.