REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8706190141 DOC. DATE: 87/06/12 NOTARIZED: NO DOCKET #
FACIL: 50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G 05000244
AUTH. NAME AUTHOR AFFILIATION
BACKUS, W. H. Rochester Gas & Electric Corp.
KOBER, R. W. Rochester Gas & Electric Corp.
RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-005-00: on 870514, containment ventilation isolation occurred. Caused by spurious signal from containment particulate radiation monitor. Operations restored all components affected to their pre-event status. W/870612 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 7
TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

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

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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

# LICENSEE EVENT REPORT (LER)

| FACILITY NAME (1) | DOCKET NUMBER (2) | PAGE (3) |
|---|---|---|
| R.E. Ginna Nuclear Power Plant | 0 5 0 0 0 2 4 4 | 1 OF 0 6 |

TITLE (4) Inadvertent Containment Ventilation Isolation During Performance of Monthly Periodic Test of Containment Particulate Radiation Monitor Due To A Frayed Conductor

| EVENT DATE (5) | | | LER NUMBER (6) | | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | |
|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAMES | DOCKET NUMBER(S) |
| 0 5 | 1 4 | 8 7 | 8 7 | — 0 0 5 | — 0 0 | 0 6 | 1 2 | 8 7 | | 0 5 0 0 0 |
| | | | | | | | | | | 0 5 0 0 0 |

| OPERATING MODE (9) | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11) | | | |
|---|---|---|---|---|---|
| N | | 20.402(b) | 20.405(c) | X 50.73(a)(2)(iv) | 73.71(b) |
| POWER LEVEL (10) | 1 0 0 | 20.405(a)(1)(i) | 50.36(c)(1) | 50.73(a)(2)(v) | 73.71(c) |
| | | 20.405(a)(1)(ii) | 50.36(c)(2) | 50.73(a)(2)(vii) | OTHER (Specify in Abstract below and in Text, NRC Form 366A) |
| | | 20.405(a)(1)(iii) | 50.73(a)(2)(i) | 50.73(a)(2)(viii)(A) | |
| | | 20.405(a)(1)(iv) | 50.73(a)(2)(ii) | 50.73(a)(2)(viii)(B) | |
| | | 20.405(a)(1)(v) | 50.73(a)(2)(iii) | 50.73(a)(2)(x) | |

LICENSEE CONTACT FOR THIS LER (12)

| NAME | TELEPHONE NUMBER |
|---|---|
| | AREA CODE |
| W.H. Backus, Technical Assistant to the Operations Manager | 3 1 5 — 5 2 4 4 4 4 6 |

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B | I L | C B L 1 | V 0 5 6 | Y | | | | | | | |
| | | | | | | | | | | | |

| SUPPLEMENTAL REPORT EXPECTED (14) | | EXPECTED SUBMISSION DATE (15) | MONTH | DAY | YEAR |
|---|---|---|---|---|---|
| YES (If yes, complete EXPECTED SUBMISSION DATE) | X NO | | | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)


On May 14, 1987 at 0055 EDST with the unit at 100% reactor power, a containment ventilation isolation occurred due to a spurious signal from containment particulate radiation monitor (R-11).

All containment ventilation isolation valves that were open, closed as designed.

Immediate corrective action taken was: after the immediate cause of the containment ventilation isolation was determined, operations restored all components affected to their pre-event status.

The intermediate cause of the event was identified to be an input signal BNC connector with a frayed middle conductor. This frayed conductor was determined to be caused by a manufacturing discrepancy during construction of the R-11 drawer. This R-11 drawer had been recently installed in March of 1987.

Corrective action taken to prevent recurrence was, to resolder the conductor to connector frayed area and notify the vendor of the manufacturing discrepancy.




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I. PRE-EVENT PLANT CONDITIONS

The unit was at 100% reactor power and the Control Room Control Operator was performing Periodic Test PT-17.2 (Process Radiation Monitors R-11 to R-22, Iodine Monitors R-10A and R-10B).

II. DESCRIPTION OF EVENT

A. EVENT:

On May 14, 1987 at 0055 EDST, while commencing the steps of PT-17.2 for R-11 (Containment Particulate Radiation Monitor), the Control Operator slid the R-11 drawer out per procedure and observed that all the drawer displays disappeared. At this same time Control Board Annunciator A-25 (Containment Ventilation Isolation) alarmed and all containment ventilation isolation valves that were open, closed as designed.

B. INOPERABLE STRUCTURES, COMPONENTS OR SYSTEMS THAT CONTRIBUTED TO THE EVENT:

None.

C. DATES AND APPROXIMATE TIMES FOR MAJOR OCCURRENCES:

- o May 14, 1987, 0055 EDST: Event date and time
- o May 14, 1987, 0055 EDST: Discovery time and date
- o May 14, 1987, 0100 EDST: R-11 drawer returned to service, containment ventilation isolation reset and all containment ventilation isolation valves returned to normal status

D. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED:

With the containment ventilation isolation, the following major components were isolated:

- o R-10A, Containment Iodine Monitor
- o R-11, Containment Particulate Radiation Monitor
- o R-12, Containment Gas Radiation Monitor

E. METHOD OF DISCOVERY:

The event was immediately apparent due to a Control Board annunciator alarm, R-11 display loss of indication, and containment ventilation isolation valve position indication in the Control Room.

F. OPERATOR ACTION:

Control Room operations personnel immediately removed the fuse from the R-11 drawer for a fuse check. Even though the fuse checked out okay, a new fuse was installed and the R-11 drawer was turned on with all normal displays returning.

Control Room operations personnel restored all components affected by the containment ventilation isolation to their pre-event status.

Control Room operations personnel completed performance of PT-17.2 on R-11 with satisfactory results.

III. CAUSE OF EVENT

A. IMMEDIATE CAUSE:

Containment ventilation isolation actuated from R-11 when R-11 drawer was slid out and all drawer displays disappeared.

B. INTERMEDIATE CAUSE:

The Intermediate cause was identified to be an input signal BNC connector with a frayed center conductor.

C. ROOT CAUSE:

The root cause was determined to be a manufacturing discrepancy because the frayed conductor and the connector were internal to the R-11 drawer.

IV. ANALYSIS OF EVENT

This event is reportable in accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(iv), which required reporting of "any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS)" in that containment ventilation isolation is an ESF sub-system.

An assessment was performed considering both the safety consequences and implications of this event with the following results and conclusions:

There were no operational or safety consequences or implications attributed to the inadvertent containment ventilation isolation because:

- The containment ventilation isolation system operated as designed.
- The components affected were restored to normal status very quickly (within approximately 5 minutes).
- The components affected were capable of withstanding the isolation.

V. CORRECTIVE ACTION

A. ACTION TAKEN TO RETURN AFFECTED SYSTEMS TO PRE-EVENT NORMAL STATUS:

- Operations, after R-11 returned to normal, restored all components affected by the event, to their pre-event status.

B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:

- The Instrument and Control (I&C) Department, during troubleshooting, were able to reproduce the R-11 event several times and traced the cause to a frayed conductor wire where it entered a connector in the R-11 drawer. The I&C department resoldered the conductor wire to the connector and were unable to reproduce the R-11 event again.

- The I&C Department visually checked all recently installed Victoreen Radiation Monitoring drawers with the same type of connectors and found them all in satisfactory condition.

- Rochester Gas and Electric (RG&E) Corporation Engineering Department notified the vendor of the workmanship failure.

- RG&E Engineering Department will perform a 10 CFR 21 evaluation for the R-11 drawer. This evaluation is expected to be complete by June 30, 1987.

VI. ADDITIONAL INFORMATION

A. FAILED COMPONENTS:

The frayed input signal conductor was an RG-58 Coaxial Cable with multi strand center conductor.

B. PREVIOUS LERs ON SIMILAR EVENTS:

A similar LER event historical search was conducted with the following results: No documentation of similar LER events could be identified.

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) |
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| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | |
| R.E. Ginna Nuclear Power Plant | 0 5 0 0 0 2 4 4 | 8 7 | — 0 0 5 | — 0 0 | 0 6 OF 0 6 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

C. SPECIAL COMMENTS:

The R-11 drawer is a Victoreen Model 942A and had just been replaced during the 1987 Annual Refueling and Maintenance Shutdown.

ROCHESTER ... 89 EAST AVENUE ROCHESTER NY 14649-00..

June 12, 1987

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

Subject: LER 87-005, Inadvertent Containment Ventilation Isolation, During Performance of Monthly Periodic Test of the Containment Particulate Radiation Monitor, Due to a Frayed Conductor
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

In accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(iv) which requires a report of, "any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF) including the Reactor Protection System (RPS)", the attached Licensee Event Report LER 87-005 is hereby submitted.

This event has in no way affected the public's health and safety.

Very truly yours,

Roger W. Kober

Roger W. Kober

xc: U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Ginna USNRC Resident Inspector

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