

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8809140105      DOC. DATE: 88/09/06      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.  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 88-007-00: on 880804, containment particulate radiation  
 monitor de-energizes due to open AC fuse.

W/8      ltr.

DISTRIBUTION CODE: IE22D      COPIES RECEIVED: LTR (1) ENCL (1)      SIZE: 2  
 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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	PD1-3 LA	1 1	PD1-3 PD	1 1
	STAHLE, C	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	ACRS WYLIE	1 1	AEOD/DOA	1 1
	AEOD/DSP/NAS	1 1	AEOD/DSP/ROAB	2 2
	AEOD/DSP/TPAB	1 1	ARM/DCTS/DAB	1 1
	DEDRO	1 1	NRR/DEST/ADS 7E	1 0
	NRR/DEST/CEB 8H	1 1	NRR/DEST/ESB 8D	1 1
	NRR/DEST/ICSB 7	1 1	NRR/DEST/MEB 9H	1 1
	NRR/DEST/MTB 9H	1 1	NRR/DEST/PSB 8D	1 1
	NRR/DEST/RSB 8E	1 1	NRR/DEST/SGB 8D	1 1
	NRR/DLPQ/HFB 10	1 1	NRR/DLPQ/QAB 10	1 1
	NRR/DOEA/EAB 11	1 1	NRR/DREP/RAB 10	1 1
	NRR/DREP/RPB 10	2 2	NRR/DRIS/SIB 9A	1 1
	NUDOCS-ABSTRACT	1 1	REG FILE 02	1 1
	RES TELFORD, J	1 1	RES/DSIR DEPY	1 1
	RES/DSIR/EIB	1 1	RGN1 FILE 01	1 1
EXTERNAL:	EG&G WILLIAMS, S	4 4	FORD BLDG HOY, A	1 1
	H ST LOBBY WARD	1 1	LPDR	1 1
	NRC PDR	1 1	NSIC HARRIS, J	1 1
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**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1) R.E. Ginna Nuclear Power Plant										DOCKET NUMBER (2) 0 5 0 0 0 2 4 4										PAGE (3) 1 OF 0 6																																			
TITLE (4) Containment Particulate Radiation Monitor De-energizes Due To a Open AC Fuse Causing an Inadvertent Containment Ventilation Isolation																																																							
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 8			0 4			8 8			8 8			-			0 0 7			-			0 0 0			9 0 6			8 8																0 5 0 0 0												
OPERATING MODE (9)									THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 81: (Check one or more of the following) (11)																																														
N									20.400(a)									20.400(a)									X									20.73(a)(2)(iv)									73.71(a)										
POWER LEVEL (10)									20.400(a)(1)(i)									20.36(a)(1)																		20.73(a)(2)(iv)									73.71(a)										
1 1 0 1 0									20.400(a)(1)(ii)									20.36(a)(2)																		20.73(a)(2)(vi)									OTHER (Specify in Abstract below and in Text, NRC Form 305A)										
									20.400(a)(1)(iii)									20.73(a)(2)(i)																		20.73(a)(2)(vii)(A)																			
									20.400(a)(1)(iv)									20.73(a)(2)(ii)																		20.73(a)(2)(viii)(B)																			
									20.400(a)(1)(v)									20.73(a)(2)(iii)																		20.73(a)(2)(ix)																			
LICENSEE CONTACT FOR THIS LER (12)																																																							
NAME																				TELEPHONE NUMBER																																			
Wesley H. Backus																				AREA CODE																																			
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 NRC						CAUSE			SYSTEM			COMPONENT			MANUFACTURER			REPORTABLE TO NRC																									
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YES (If yes, complete EXPECTED SUBMISSION DATE)																				MONTH DAY YEAR																																			
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**ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)**

On August 4, 1988 at 0222 EDST with the unit at approximately 100% reactor power, an inadvertent containment ventilation isolation occurred due to containment particulate radiation monitor (R-11) de-energizing.

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

Immediate operator action was to perform the applicable alarm response procedures actions. This included verifying automatic actions, determining the cause of containment ventilation isolation, and making appropriate notifications.

The cause of the event was determined to be a random failure of an internal bridge rectifier power supply which opened the AC Fuse supplying power to the R-11 drawer.

Corrective action taken was to replace the R-11 drawer containing the failed power supply with a qualified spare, followed by a satisfactory calibration and return to service.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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

TEXT (If more space is required, use additional NRC Form 388A's) (17)

I. PRE-EVENT PLANT CONDITIONS

The plant was at approximately 100% steady state full power with no major activities in progress.

II. DESCRIPTION OF EVENT

## A. DATES AND APPROXIMATE TIMES FOR MAJOR OCCURRENCES:

- August 4, 1988, 0222 EDST: Event date and time
- August 4, 1988, 0222 EDST: Discovery date and time
- August 4, 1988, 1706 EDST: R-11 drawer returned to service, containment ventilation isolation reset and all containment ventilation isolation valves returned to normal status.

## B. EVENT:

On August 4, 1988 at 0222 EDST with the reactor at approximately 100% full power, the following control board alarms were received, E-16 (RMS Process Monitor High Activity), and A-25 (Containment Ventilation Isolation). The control room operators, responding to the above alarms, observed that the R-11 (Containment Particulate Radiation Monitor) drawer was de-energized. All containment ventilation isolation valves that were open, closed as designed.

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

None.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/95

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

R.E. Ginna Nuclear Power Plant

0 5 0 0 0 2 4 4

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

## 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-12, Containment Gas Radiation Monitor

## E. METHOD OF DISCOVERY:

The event was immediately apparent due to control board annunciator alarms, R-11 radiation monitor drawer de-energized, and containment ventilation isolation valve position indication in the control room.

## F. OPERATOR ACTION:

Control room operators responded to the event by performing the applicable actions of alarm response procedures, E-16, A-25, and RMS-11. This included the following:

- o Verifying that all containment ventilation isolation valves that were open, closed as designed.
- o Determining why R-11 was de-energized.
- o Notifying the Instrument and Control Department to troubleshoot R-11, determine cause for malfunction, and restore R-11 to operable status.
- o Notifying the NRC and Higher Supervision of the ESF actuation.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

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

TEXT (If more space is required, use additional NRC Form 358A's) (17)

III. CAUSE OF EVENT

## A. IMMEDIATE CAUSE:

Containment ventilation isolation actuated from R-11 when an AC Fuse opened in the line supplying power to the R-11 drawer.

## B. INTERMEDIATE CAUSE:

The AC Fuse supplying power to the R-11 drawer opened because of a failure of an internal bridge rectifier power supply.

## C. ROOT CAUSE:

The root cause was determined to be a random failure of an electronic component.

IV. ANALYSIS OF EVENT

This event is reportable in accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(iv), which requires 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)". The containment ventilation isolation due to loss of power to R-11 was an automatic actuation of an ESF sub-system.

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

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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

TEXT (If more space is required, use additional NRC Form 368A's) (17)

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

- o The containment ventilation isolation system operated as designed.
- o The components affected were capable of withstanding the isolation.
- o Even if the event had occurred under a more severe set of initial conditions, (i.e. the loss of power to R-11 and a valid containment ventilation isolation signal) the containment ventilation isolation would have taken place as designed.

Based on the above, it can be concluded that the public's health and safety was assured at all times.

V. CORRECTIVE ACTION

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

- o The Instrument and Control (I&C) Department, after troubleshooting the R-11 drawer, determined that the problem was a bridge rectifier power supply internal to the drawer.
- o I&C Department replaced the R-11 drawer containing the failed power supply with a qualified spare, replaced the opened fuse and tested and calibrated the R-11 drawer satisfactorily.
- o Operations, after R-11 was restored to service, returned all components affected by the event to their pre-event status.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/95

FACILITY NAME (1)

COCKET NUMBER (2)

LER NUMBER (8)

PAGE (3)

R.E. Ginna Nuclear Power Plant

0 5 0 0 0 2 4 4 8 8 - 0 0 7 - 0 0 0 6 OF 0 6

TEXT (If more space is required, use additional NRC Form 356A's) (17)

## B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:

- o As the root cause was determined to be a random failure of an electronic component there is no action planned at this time to prevent recurrence.

VI. ADDITIONAL INFORMATION

## A. FAILED COMPONENTS:

- o The failed power supply was a Bridge Rectifier, component # 2W06, supplied by Victoreen.
- o The opened fuse was a "BUSS", AGC-1, 250 volt fuse.

## B. PREVIOUS LERS ON SIMILAR EVENTS:

A similar LER event historical search was conducted with the following results: No documentation of similar LER events with the same root cause of Ginna Station could be identified. However, LER 87-005 was a similar event with a different root cause.

## C. SPECIAL COMMENTS:

The R-11 drawer is a Victoreen Model 942A.

September 6, 1988

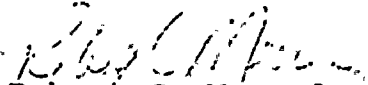
U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Subject: LER 88-007, Containment Particulate Radiation Monitor  
De-energizes Due To An Open AC Fuse Causing An  
Inadvertent Containment Ventilation Isolation  
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 88-007 is hereby submitted.

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

Very truly yours,

  
Robert C. Mecredy  
General Manager  
Nuclear Production

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

Ginna USNRC Senior Resident Inspector

151