

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <b>PLANT VOGTLE - UNIT 1</b>	DOCKET NUMBER (2) <b>0 5 0 0 0 4 2 4</b>	PAGE (3) <b>1 OF 0 3</b>
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TITLE (4)  
**120 VAC Voltage Transient Causes ESF Actuations**

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)
03	30	87	87	005	03	04	29	87			0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9) <b>1</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)					
POWER LEVEL (10) <b>0 1 0</b>	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)		
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)		
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)			
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)			
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)				

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>W. E. Burns, Nuclear Licensing Manager - Vogtle</b>	TELEPHONE NUMBER <b>4 0 4 5 2 6 1 7 0 1 4</b>
AREA CODE <b>4 0 4</b>	<b>5 2 6 1 7 0 1 4</b>

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15) <b>0 5 1 6 8 7</b>
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 30, 1987 at 0425 CST with the unit in mode 1 at 10% rated thermal power, a control room ventilation isolation (CRI) occurred automatically. The CRI was caused by a false signal from the control room air intake process monitor, 1RE-12116. The redundant radiation monitor, 1RE-12117, revealed no abnormal readings or alarms. An investigation revealed that a trouble light was illuminated on the Safety Related Display Console (SRDC) for 1RE-12116. The trouble light indicated that a voltage transient had caused the monitor to fail downscale and reset to its failsafe or default position.

Further testing is planned to determine the extent of the voltage transient effects and to allow for identification of any long term corrective action. The testing will be completed when the unit is returned to an operating mode that allows inverter testing to be safely accomplished.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR 8 7	SEQUENTIAL NUMBER - 0 0 5	REVISION NUMBER - 0 3		0 2 OF 0 3

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

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) since an unplanned Engineered Safety Feature (ESF) actuation occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event on March 30, 1987 the unit was in mode 1 (power operation) at 10% rated thermal power. Control room air intake radiogas monitors, 1RE-12116 and 1RE-12117, were operable. The control room ventilation system was in the normal mode of operation.

C. DESCRIPTION OF EVENT

On March 30, 1987, at 0425 CST, a control room ventilation isolation (CRI) occurred. The operator checked the Safety Related Display Console (SRDC) for an alarm condition of the control room air intake monitors, 1RE-12116 and 1RE-12117. No alert or high radiation alarm existed on either monitor, but a trouble light was indicated on the SRDC for monitor 1RE-12116, which had failed downscale. Monitor 1RE-12117 indicated normal, while monitor 1RE-12116 was reading default values. Default values are permanent inserted values inputted whenever there is a loss or interruption of power to the data processing module (DPM).

Since monitor 1RE-12117 was indicating normal, and since there was a trouble light but no alarms on monitor 1RE-12116, it was concluded that a problem with the power supply to the DPM for monitor 1RE-12116 had caused the CRI. Monitor 1RE-12116 was removed from service and the control room ventilation was returned to normal ventilation at approximately 0435 CST on 3/30/87. Plant systems functioned as designed to isolate the control room.

D. CAUSE OF EVENT

The control room air intake radiogas monitor, 1RE-12116, apparently sensed a power interruption or voltage transient, and reverted to its failsafe (default) position, i.e., generation of a CRI actuation signal.

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		0	0	5	0	0	3 OF 0 3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

E. ANALYSIS OF EVENT

The redundant radiation monitor, 1RE-12117, in operation at the time of the event, displayed normal reading and no alarm condition. Monitor 1RE-12116 did not show a visual high radiation alarm, but a trouble light on the SRDC indicated a fault. The control room operators determined a valid radiation signal did not exist. Since the cause was determined to be a false CRI actuation signal, and since plant safety systems functioned as designed, it is concluded that this event had no adverse affect on plant safety. Since this ESF (CRI) functions independently of reactor power, this event would also have had no adverse affect on plant safety even at higher power levels.

F. CORRECTIVE ACTIONS

After the event, Instrument and Control personnel connected a voltage recorder to 1RE-12116's input voltage to monitor future possible voltage transients. Corrective actions remain to be determined until the scope and extent of the spurious actions can be identified by further investigation and/or testing. Testing is planned when the unit is returned to a mode which allows 120 VAC system testing to be adequately and safety accomplished. Long term corrective action will be addressed in a supplemental report that is expected to be submitted by May 15, 1987.

G. ADDITIONAL INFORMATION

Previous LERs on similar events:  
 Licensee Event Report 50-424/1987-005-00, dated 3-25-87  
 Licensee Event Report 50-424/1987-005-01, dated 4-3-87  
 Licensee Event Report 50-424/1987-005-02, dated 4-27-87  
 These LER's indicate corrective action to be completed when plant is operating in a mode where this can be safety accomplished.

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 Radiation Monitoring System -IL

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**L. T. Gucwa**  
Manager Nuclear Safety  
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*the southern electric system*

SL-2425  
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X7GJ17-V310

April 29, 1987

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

NRC DOCKET 50-424  
OPERATING LICENSE NPF-68  
PLANT VOGTLE - UNIT 1  
LICENSE EVENT REPORT  
120 VAC VOLTAGE TRANSIENT CAUSES ESF ACTUATIONS

Gentlemen:

Pursuant to the requirements of 10 CFR 50.73(a)(2)(iv), Georgia Power Company is submitting a Licensee Event Report (LER) concerning an actuation of an Engineered Safety Feature at Plant Vogtle - Unit 1.

Sincerely,

L. T. Gucwa

PAH/lm

Enclosure: LER 50-424/1987-005-03

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U. S. Nuclear Regulatory Commission  
Document Control Desk  
April 29, 1987

c: Georgia Power Company

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