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C. K. McCoy
Vice President, Nuclear
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Georgia Power
the southern electric system

May 13, 1992

ELV-03731
001687

Docket No. 50-424

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

Gentlemer:

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT
VALVE MANUFACTURING DEFECT LEADS TO CONTAINMENT
ISOLATION VALVE FAILING OPEN

In accordance with 10 CFR 50.73, Georgia Power Company (GPC) hereby submits the enclosed revised report related to an event which occurred on September 5, 1991. This revisor provides supplemental information resulting from an investigation performed subsequent to the original report.

Sincerely,

C.K. McCoy
C. K. McCoy

CKM/NJS/gmb

Enclosure: LER 50-424/1991-015, Revision 1

xc: Georgia Power Company
Mr. W. B. Shipman
Mr. M. Sheibani
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebnetter, Regional Administrator
Mr. D. S. Hood, Licensing Project Manager, NRR
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **VOGTLE ELECTRIC GENERATING - UNIT 1** DOCKET NUMBER (2) **0 5 0 0 4 2 4** PAGE (3) **1** OF **3**

TITLE (4) **VALVE MANUFACTURING DEFECT LEADS TO CONTAINMENT ISOLATION VALVE FAILING OPEN**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQ NUM	REV	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
09	05	91	91	015	01	05	13	92			05000
											05000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)

OPERATING MODE (9)	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
1	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
POWER LEVEL 86	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	X OTHER (Specify in Abstract below) 10CFR 21
	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
MEDHI SHEIBANI, NUCLEAR SAFETY AND COMPLIANCE	AREA CODE: 706, NUMBER: 826-3209

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPRDS
B	JM	ISV	A391	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (16)

On August 29, 1991, a local leak rate test (LLRT) of a containment isolation valve (CIV), service air system check valve 12401U4034, was conducted. Leakage limits were exceeded, the Technical Specification (TS) limiting condition for operation (LCO) was entered, and a deficiency card (DC) was initiated. On September 5, 1991, an investigation into the cause of the leakage found the disk of this check valve stuck fully open. A casting mark on the valve hinge engaged the hinge support when the disk was in the full open position and would not allow the disk to return to the closed position.

On December 6, 1991, a final review of the DC for adequacy of investigation and corrective actions identified that 12401U4034 may have been stuck in the full open position for a period of time longer than that allowed by the TS LCO action statement requirements. However, since firm evidence for the time that the valve became stuck open does not exist, this report is being submitted as a LER revision for 10 CFR 21 reporting only and is not reportable per 10 CFR 50.73.

The cause of this event was the manufacturer's casting mark on the valve hinge, which caused the disk to bind and remain in the open position. The casting mark was removed, LLRT testing was completed satisfactorily, and 12401U4034 was returned to service.

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		YEAR	SEQ NDM	REV		
VOGTLE ELECTRIC GENERATING - UNIT 1	05000424	91	015	01	2	OF 3

TEXT

A. REQUIREMENT FOR REPORT

This revised report is being submitted per 10 CFR 21. Revision 0 was submitted voluntarily while further investigation and evaluation proceeded. The results of the additional investigation are stated in the CORRECTIVE ACTION section, Item 3.

B. UNIT STATUS AT TIME OF EVENT

At the time of the discovery of this condition on September 5, 1991, Unit 1 was in Mode 1 (Power Operation) at 86 percent of rated thermal power. Other than that described herein, there was no inoperable equipment which contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On August 29, 1991, a CIV local leak rate test (LLRT) of service air system check valve 12401U4034 was conducted, leakage limits were exceeded, and the TS LCO was entered. A DC was written, and a work order was initiated to investigate the deficiency and restore the valve to operability. A reportability review of the DC performed on August 30, 1991, found that this condition was not reportable since a LCO for an inoperable CIV was entered following the LLRT failure.

On September 5, 1991, an investigation into the cause of the leakage found the valve stuck fully open. A casting mark on the valve hinge engaged the hinge support when the disk was in the full open position and would not allow the disk to return to the closed position. The casting mark was removed, and the valve was satisfactorily tested and returned to service.

On December 6, 1991, a final review of the DC for adequacy of investigation and corrective actions identified that valve 12401U4034 may have been stuck in the full open position for a period of time longer than that allowed by the TS LCO action requirements. This review found that the service air system had not been used for about 17 months, or since early April 1990, when the previous refueling outage was completed, and valve 12401U4034 was required to be operable following successful LLRT testing. Except for quarterly ASME testing performed on a valve adjacent to valve 12401U4034 prior to the LLRT failure, there had apparently been no system operation which could have lifted the check valve to its full open position. However, since firm evidence for the time that the valve became stuck open does not exist, this condition is not reportable per 10 CFR 50.73 (a)(2)(i) as operation of the unit in a condition prohibited by TS requirements.

D. CAUSE OF EVENT

The cause of this event was the manufacturer's casting mark on the valve hinge which engaged the hinge support and prevented the valve disk from

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TEXT CONTINUATION**

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VOGTLE ELECTRIC GENERATING - UNIT 1	0 5 0 0 0 4 2 4	9 1	0 1 5	0 1	3	OF 3

TEXT

closing. A conversation with the valve manufacturer's representative uncovered no previous similar events.

E. ANALYSIS OF EVENT

Although check valve 12401U4034 may have been open for a period of time longer than allowed by the TS, the containment penetration involved remained sealed from the outside environment by the adjacent, normally closed (and fail closed) CIV, 1HV-9385. Additionally, prior LLRT testing ensured that 1HV-9385 would properly seal the penetration involved. Furthermore, no incident occurred during the period of time involved which challenged the integrity of this penetration. Based on these considerations, there was no adverse effect on plant safety or the health and safety of the public as a result of this event.

F. CORRECTIVE ACTION

1. The casting mark on valve 12401U4034 was removed, LLRT testing was completed satisfactorily, and the valve was returned to service.
2. A review of the DC database and work order database found no similar occurrences of this type of event.
3. Only one other use of this type of valve exists in a CIV application at the plant. This other valve was examined and found to become stuck open when pushed to its full open position, due to a rough surface on the hinge casting. The casting was reworked to allow free movement and the valve was restored to service. The valve vendor was contacted regarding this problem, and he supplied a list of valves sold to the plant for both CIV and other safety-related applications, which may be susceptible to becoming stuck open. Over half of these valves are inspected as part of valve inspection programs and no further problems, as described in the report, have been found. Of the remaining valves, a representative sample will be inspected during the next two refueling outages on each unit. If further check valve problems are found, they will be corrected and additional inspections performed, as necessary.

G. ADDITIONAL INFORMATION

1. Failed Components:

Check valve manufactured by Anchor Darling Valve Company
Model # 058718

2. Previous Similar Events:
None.

3. Energy Industry Identification System Code:

Service Air System - LF
Containment Isolation Control System - JM