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THE SOUTHERN ELECTRIC SYSTEM

W. G. Hairston, III
Senior Vice President
Nuclear Operations

ELV-00785
1581n

Docket No. 50-424

August 24, 1989

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

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT
RADIATION MONITOR HIGH ALARM RESULTS
IN FUEL HANDLING BUILDING ISOLATION

In accordance with 10 CFR 50.73, Georgia Power Company hereby submits the enclosed report related to event which occurred on July 28, 1989.

Sincerely,


W. G. Hairston, III

WGH, III/PAH/gm

Enclosure: LER 50-424/1989-017

xc: Georgia Power Company
Mr. C. K. McCoy
Mr. G. Berkhold, Jr.
Mr. R. M. Ojom
Mr. P. D. Rushton
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebner, Regional Administrator
Mr. J. B. Hopkins, Licensing Project Manager, NRR
Mr. J. F. Rogge, Senior Resident Inspector, Vogtle

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Vogtle Electric Generating Plant - Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 2 4	PAGE (3) 1 OF 04
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TITLE (4)
RADIATION MONITORS HIGH ALARM RESULTS IN FUEL HANDLING BUILDING ISOLATION

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)																																																																																															
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LICENSEE CONTACT FOR THIS LER (12)

NAME R. M. ODOM, NUCLEAR SAFETY AND COMPLIANCE MANAGER	TELEPHONE NUMBER AREA CODE 404 826-3201
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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

SUPPLEMENTAL REPORT EXPECTED 14

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 7-28-89, at 1720 CDT, radiation monitor ARE-2532B went to its high alarm setpoint, causing a Fuel Handling Building (FHB) Isolation. The FHB Post Accident Filtration units started and the appropriate vents and dampers actuated. Control room operators announced the FHB isolation over the public address system and began to survey other area monitors to check for the possible spread of radioactive contaminants, but found no other monitor with an abnormal reading. At approximately 1730 CDT, the activity level on ARE-2532B dropped below the high alarm setpoint. At 1923 CDT, the FHB isolation signal was reset, and at 1924 CDT, the FHB Post Accident Filtration Units were stopped.

An initial review indicated that RCS coolant had leaked inside the Post Accident Sampling System panel, which was in use at the time. It was believed that a portion of the RCS had evaporated and initiated the ARE-2532B high alarm condition. However, smears taken inside the panel found no loose contamination which would indicate that RCS leakage occurred. Additional smears found signs of contamination on a floor drain but potential sources of this contamination have not been proven.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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TEXT (If more space is required, use additional NRC Form 305A's) (17)

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because an unplanned Engineered Safety Feature (ESF) actuation took place when a Fuel Handling Building (FHB) isolation occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 1 was operating in Mode 1 (Power Operation) at 100% rated thermal power. There was no inoperable equipment which contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On 7-28-89, at 1536 CDT, plant operators opened containment isolation valve 1HV-8220. This lineup permits a Reactor Coolant System (RCS) sample to be taken and analyzed from the Post Accident Sampling System (PASS) panel in the FHB. Normally, RCS sampling is performed at the Primary Chemistry Lab. However, the PASS panel is sometimes utilized in order to maintain its operability. A technician was conducting the sampling and analysis process per Procedure 35611-C, "Remote Operation of the Post Accident Sampling System". The procedure provides for analysis of RCS coolant to determine dissolved oxygen, pH, boron, chloride, dissolved hydrogen and various isotopes.

At 1720 CDT, radiation monitor ARE-2532B exceeded its high alarm setpoint, causing a FHB Isolation. The FHB Post Accident Filtration units started and the appropriate vents and dampers actuated. Control room operators announced the FHB isolation over the public address system and began to survey other area monitors to check for the possible spread of radioactive containments, but found no other monitor with an abnormal reading except for the Continuous Air Monitor (CAM) in room A10, which registered abnormally high activity. The technician who was at the PASS panel "backed out" of the procedure; i.e., left the panel in a safe condition, and left the area. At approximately 1730 CDT, the activity level on ARE-2532B dropped below the high alarm setpoint.

At 1806 CDT, 1HV-8220 was closed as a precaution. Plant operators initially believed that RCS coolant may have passed into the FHB via this valve and initiated the FHB isolation. At 1923 CDT, the FHB isolation signal was reset, and at 1924 CDT, the FHB Post Accident Filtration Units were stopped. An Event Review team was formed to determine the cause(s) and corrective action(s) necessary to prevent recurrence of this event. The team took the following actions:

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TEXT (If more space is required, use additional NRC Form 386A's) (17)

- 1) Obtained smears in and around the PASS panel to determine if RCS leakage had occurred there.
- 2) Obtained smears of nearby floor drains to find evidence of contamination at those points.
- 3) Pressure tested a drain line from the RCS sampling line to the floor drain to determine potential valve leakage.
- 4) Pressure tested piping in the PASS panel to find evidence of RCS leakage.
- 5) Searched for alternate sources of contamination and investigated the possibilities of their being the cause of this event.

The team reviewed several possible causes but were unable to reach a conclusion as to the cause of this event.

D. CAUSE OF EVENT

An initial review indicated that RCS coolant had leaked inside the PASS panel, a portion of which evaporated, and initiated the ARE-2532B high alarm condition. However, smears taken both inside and behind the panel found no loose contamination which would indicate that RCS leakage had occurred. Additional smears found signs of contamination on a floor drain in room A10, indicating that valve 1HV-3258 had possibly leaked or been temporarily opened. Valve 1HV-3258 provides a path between the RCS sampling line and a line to the room A10 floor drain. As a test of this hypothesis, the RCS sampling line was pressurized but no leakage was found to pass through 1HV-3258 to the floor drain. Nor was leakage detected either in or around the PASS panel as a result of this pressure testing. Additional investigation into the possible source of the floor drain contamination found a small amount of water leaking past valve 1HV-8103, constantly introducing contamination into room A10 (1HV-8103 is a reactor coolant pump seal water inlet valve). However, it is not known if this leakage in room A10 is sufficient to actuate the high radiation alarm for AFE-2532B, which is located in a different area.

Contributing to the occurrence of this event was the conservatively low alarm setpoint of monitor ARE-2532B. The setpoint at the time of the event represented an alarm level approximately one two-hundredth of the required TS alarm setpoint.

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			0 1 7	0 0	0 4	0 4

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

E. ANALYSIS OF EVENT

When the FHB isolation occurred on 7-28-89, the appropriate vents and dampers actuated and the FHB Post Accident Filtration units started as designed to isolate the FHB atmosphere. While the cause of any actual release of radioactivity to the FHB ventilation system is undetermined, an examination of Plant Vent monitor response indicated no detectable increase in its reading during this event. Additionally, plant operators responded to evacuate the area and to survey other monitors to determine the possible spread of radioactive contaminants. Also, the technician at the PASS panel "backed-out" of the sampling procedure so that the PASS panel was left in a secure condition. Based on these considerations, there was no adverse affect to plant safety or public health and safety as a result of this event.

F. CORRECTIVE ACTION

1. The ARE-2532B alarm setpoint has been raised. In addition, similar monitors, ARE-2532A, ARE-2533A and ARE-2533B have had their alarm setpoints increased.
2. As an enhancement, Procedure 35611-C, "Remote Operation Of The Post Accident Sampling System", has been revised to clarify PASS panel operating steps.

G. ADDITIONAL INFORMATION

1. Failed Components
None
2. Previous Similar Events
LER 50-424/1988-045, dated 1-30-89.
This 1988 FHB isolation occurred when 1HV-8220 was inadvertently left open. corrective action to change a procedure and ensure that 1HV-8220 is closed, was not applicable to the prevention of the 7-28-89 event.
3. Energy Industry Identification System Code
Reactor Coolant System - AB
Post Accident Sampling System - IP
Radiation Monitoring System - IL
Fuel Handling Building HVAC System - VG