Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526 3195

Mailing Address
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 868 5581

December 6, 1990

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

ELV-02296
0726

Docket No. 50-425

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

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT
LCO 3.0.3 ENTRY DUE TO INOPERABLE STEP
DEMAND COUNTERS FOR CONTROL BANK D

In accordance with 10 CFR 50.73, Georgia Power Company hereby submits the enclosed report related to an event which occurred on November 10, 1990.

Sincerely,

W. G. Hairston, III

WGH,III/NJS/gm

Enclosure: LER 50-425/1990-017

xc: Georgia Power Company
Mr. C. K. McCoy
Mr. W. B. Shipman
Mr. P. D. Rushton
Mr. R. M. Odom
NORMS

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

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NRC Form 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

LICENSEE EVENT REPORT (LER)

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

TITLE (4)
LCO 3.0.3 ENTRY DUE TO INOPERABLE STEP DEMAND COUNTER FOR CONTROL BANK D

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)
										0 5 C 0 0
1 1	1 0	9 0	9 0	0 1 7	0 0	12	06	90		0 5 0 0 0

OPERATING MODE (9)	2	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)							
POWER LEVEL	0		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)
			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)
			20.405(a)(1)(iii)	X	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	
R. M. ODOM, NUCLEAR SAFETY AND COMPLIANCE	404	826-3201

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORT TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORT TO NPRDS	
X	A A	Z I C	W 1 2 5	N O							

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

ABSTRACT (16)

On 11-10-90, AT 1245 CST, with the reactor critical and low power physics testing in progress, it was noticed that the Group 2 step demand counter for control bank D had stopped counting. At 1259 CST, the Group 1 step demand counter for control bank D was also discovered to have stopped counting and Technical Specification (TS) 3.0.3 was entered due to both step demand counters for control bank D being inoperable. Actual bank D position was known based on Digital Rod Position Indication (DRPI), Proteus computer indication, and pulse-to-analog converter indication at the rod control cabinet. At 1320 CST, it was discovered that the cover for the bank D Group 1 step counter was slightly open which disengaged the step counter from its drive motor. The Group 1 step counter was restored to service and TS 3.0.3 was exited at 1354 CST.

The root cause of this event was attributed to inadequate operator technical knowledge regarding the effect of opening the cover on the operation of the step counter. The cover had apparently been opened during investigation of the problem with the Group 2 step demand counter. Training concerning this design feature will be provided during 1991 Licensed Operator Requalification.

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(i) because a condition not provided for in the action requirements of Technical Specification (TS) 3.1.3.2 existed.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 2 was in Mode 2 (Startup) with the reactor critical and at approximately 5E-8 amps reactor power. Testing in accordance with procedure 88002-C, "Reload Low Power Physics Testing," was in progress. Other than that described herein, there was no inoperable equipment which contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On 11-10-90, rod bank testing for measuring the reactivity worth of the individual rod banks was being performed in accordance with the requirements of procedure 88002-C. During this testing, "reference" control bank C was being withdrawn as control bank D was inserted. At 1245 CST, after inserting control bank D to 5 steps, it was noticed that the Group 2 step demand counter for bank D had stopped counting at 9 steps. A check of the Group 1 step demand counter for bank D, the Digital Rod Position Indication (DRPI) system, and the pulse-to-analog (P/A) converter indication at the rod control cabinet verified that actual bank D position was 5 steps. A preliminary investigation of the problem by control room operators indicated that the Group 2 step demand counter was apparently sticking and the action requirements of TS 3.1.3.2 were therefore entered for an inoperable demand position indicator.

At 1259 CST, while withdrawing control bank D to 10 steps, to stabilize reactor power, it was noticed that the Group 1 step demand counter for bank D had stopped counting at 7 steps. Since the action requirements of TS 3.1.3.2 only address one inoperable demand position indicator per bank, the requirements of TS 3.0.3 were entered due to both step demand counters for bank D being simultaneously inoperable.

At 1320 CST, the Unit 2 Reactor Operator discovered that the cover of the bank D Group 1 step demand counter was slightly open. After discussion with Instrumentation and Control (I&C) personnel and Engineering personnel, it was recognized that the open counter cover had resulted in the inoperability of the Group 1 step demand counter since the counter is disengaged from its drive motor when the cover is open. The counter cover had apparently been opened by control room operators during the investigation of the problem with the Group 2 step demand counter.

The cover for the Group 1 step demand counter was closed and a plan was developed to verify the proper operation of the counter and to reset it to agree with DRPI. Since the actual position of bank D was known based on DRPI, Proteus, and P/A converter indication, the operation of the Group 1 step demand counter was to be monitored as bank D was further withdrawn in support of the rod bank swap testing. Control bank D would then be fully

inserted and driven inward an additional 5 steps to ensure full insertion and the P/A converter and the step demand counter would be reset to zero. This plan was implemented and, at 1354 CST, TS 3.0.3 was exited after it was verified that the Group 1 step demand counter was operating properly and was maintaining agreement with DRPI.

The Group 2 step demand counter was restored to operable status at 2235 CST on 11-10-90 after completion of corrective maintenance action.

D. CAUSE OF EVENT

The cause for the bank D Group 2 step demand counter sticking was determined to be an accumulation of old grease on the clutch engaging rod connected to the counter cover. The accumulation of grease was not allowing the drive motor gears to engage.

The cause for Control Room operators inadvertently leaving the cover for the Group 1 step demand counter slightly open has been determined to be inadequate operator technical knowledge regarding the effect that opening the cover has on the operation of the step demand counter.

E. ANALYSIS OF EVENT

While both step demand counters for control bank D were simultaneously inoperable, actual control bank D position was known at all times by constant monitoring of DRPI, Proteus, and P/A converter indication. Also, reactivity was monitored constantly by both control room operators and Reactor Engineering personnel for any unexpected changes. Based on these considerations, there was no adverse effect on plant safety or on the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

1. Training will be provided during 1991 Licensed Operator Requalification to ensure all control room operators are knowledgeable that opening the cover of a step demand counter will prevent its operation. A shift briefing book item has been initiated to inform control room operators of this, also.

2. Georgia Power Company is evaluating the need for preventive maintenance actions for the rod control system, which would include the step demand counters. This review will be completed by 2-28-91 with appropriate actions to follow based on the review.

G. ADDITIONAL INFORMATION

1. Failed Components Identification

   Bank D Group 2 Step Demand Position Counter
   Manufactured by Weston Instrument

2. Previous Similar Events

None.

3. Energy Industry Identification System Codes

Control Rod Drive System (PWR) - AA