February 4, 1991

ELV-02479 0816

W. G. Mainston, III

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 PERSONNEL ERROR RESULTS IN MISSED SPECIAL CONDITION SURVEILLANCE

In accordance with 10 CFR 50.73, Georgia Power Company hereby submits the enclosed report related to an event which was discovered on January 7, 1991.

Sincerely,

W.S. Annt Is

W. G. Hairston, III

WGH, III/NJS/gm

Enclosure: LER 50-425/1991-001

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

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<u>U. S. Nuclear Regulatory Commission</u> 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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OWER 20.405(#)(1)(1)				50.36(=)(1)			50.73(8)(2)	73.71(c)										
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During the period between 1518 CST on 1-2-91 and 0743 CST on 1-7-91, the rod position deviation monitor alarm was inoperable and the special condition surveillance requirement of Technical Specification (TS) 4.1.3.2, which is applicable when the monitor is inoperable, was not irplemented. The TS requires that the Demand Position Indication System and the Digital Rod Position Indication System be compared at least once per 4 hours when the rod position deviation alarm is inoperable.

The cause of this event was a cognitive personnel error on the part of the Balance of Plant (BOP) operator. The BOP operator failed to follow procedure on 1-2-91 when he improperly entered a computer point value. Contributing to this event was the failure of a relay output circuit card in the interface between the DRPI and the Proteus computer.

The failed relay output circuit card has been replaced and the BOP operator has been counseled regarding the importance of procedural compliance.

NRC Form 366A (6-89)	LICENSEE TEXT	EVENT	REPOR	CLEAR REGA C (LER	LATORY C L)	OMMISSION			Yum	ROVED EXP [R	COME:	NO 3150 4/30/92	OTDA		
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VOOTLE ELECTRI	C GENERATING	PLANT -	UNIT 2	050	0004	2 5	91		0	01		0.0	2	QF.	4

## A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(i) because the Technical Specifications (TS) were violated when special condition surveillance tasks were not performed.

## B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 2 was operating in Mode 1 (Power Operation) at 100% of rated thermal power. Other than that described herein, there was no inopers .e equipment which contributed to the occurrence of this event.

## C. DESCRIPTION OF EVENT

On 1-2-91 at 1511 CST, the rod position deviation monitor alarm annunciated. Control room personnel determined that the Digital Rod Position Indication (DRPI) display and the control rod demand position indication had not deviated and that the alarm was invalid. The rod position deviation monitor alarm is a Proteus (plant) computer generated alarm. The Balance of Plant (BOP) operator cleared the alarm at 1518 CST by manually changing computer point YCO400 from alarm to normal, using the entered value field, which removed the alarm limit and automatically removed YCO400 from the scanning function. This rendered the rod position deviation monitor inoperable because this computer point controls the alarm signal and it was not being updated by the scanning function.

On 1-7-91 at 0730 CST, the system engineer was reviewing the computer status and found that YCO400 had been removed from scan and that several rod position computer points were exhibiting "bad" values (a series of x's), even though the control room DRPI and the demand position indicators were in agreement. The Unit Shift Supervisor was advised of this condition and at 0743 CST, the TS 4.1.3.2 special condition four hour surveillance for an inoperable rod position deviation monitor was initiated.

During the period between 1518 CST on 1+2-91, and 0743 on 1+7+91, the rod position deviation monitor alarm was inoperable and the special condition surveillance requirement, which is applicable when the monitor is inoperable, was not implemented. When this condition occurs, the TS requires that the Demand Position Indication System and the Digital Rod Position Indication System be compared at least once per 4 hours.

## D. CAUSE OF EVENT

The cause of this event was a cognitive personnel error on the part of the BOP operator. He failed to follow procedure 13504-C, "Proteus Computer," when entering a computer point value into the Proteus computer. The BOP operator should have entered a "1" into the entered value field and into the entry scan field, as required by procedure. The effect of this omission was that the computer point YCO400 (Rod Alarm) limit and scan function were

NRC Form 366A (6~89)	LICENSEE	U.S. NO EVENT REPORT CONTINUATION	(LER)	APPROVED DHE NO SISD-DICA EXPIRES: 4/30/92								
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VOOTLE ELECTRIC	GENERATING	PLANT - UNIT 2	05000425	91	001	00	3 OF	4				

not returned to service. There were no unusual characteristics of the work location which contributed to the occurrence of this error.

A contributing cause was the failure of a relay output circuit card in the interface between DRPI and the Proteus computer. This failure was discovered several days after the event while investigating the source of the "bad" quality rod position values which were exhibited in the Proteus computer.

Additionally, a review of the event identified a lack of detailed understanding of the Proteus computer operation on the part of the BOP operator.

#### E. ANALYSIS OF EVENT

The lack of a deviation between the DRPI and the control rod demand position indication and the continued performance of TS 4.1.3.2 at twelve hour intervals provides a reasonable degree of assurance that no condition existed which could have resulted in an undesirable neutron flux variation in the reactor core. Based on this consideration, there was no adverse impact on riant safety or the health and safety of the public as a result of this event.

#### F. CORRECTIVE ACTION

- The BOP operator has been counseled regarding the importance of procedural compliance.
- 2. The failed relay output circuit card has been replaced.
- As of 1-28-91, more detail related to the operation of the Proteus computer has been included in licensed operator requalification training. This requalification training cycle will be completed on March 8, 1991.
- 4. Procedures 17010-1 & 2, "Annunciator Response Procedures For ALB 10 On Panel 1Cl On MCB," and procedure 13504-C, "Proteus Computer," will be revised by 2-28-91 to provide stricter administrative control of Proteus computer operations. This will further limit the number of individuals with access to change parameters in the computer.
- 5. A Standing Order has been issued which implements administrative controls for Proteus computer operations. This order will remain in effect until corrective actions 3) and 4) are completed.
- Vogtle Electric Generating Plant will implement a routine check (shiftly) of computer generated alarms associated with TS surveillances by 3-29-91.

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VESTLE ELECTRIC	GENERATING PLANT - UNIT 2	05000425	91		0 0	1	0 0		4	OF	4

Proteus computer and relay output circuit card manufactured by Westinghouse Electric Corp. Computer Model #W2500 Relay output circuit card Model #QRO, Part #2840A18601

2. Previous Similar Events:

LER 50-424/1990-021, dated 12-26-90.

Corrective actions from this LER including more detailed training on Proteus computer operations had not yet been fully implemented. At the time of this event, GPC did not recognize the potential for this error to recur prior to implementation of the revised training. As a result, immediate actions after the original occurrence, such as creating a Standing Order or placing the LER in the required reading book, had not been taken.

3. Energy Industry Identification System Code:

Control Rod Drive System - AA

Computer System - ID