

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) EDWIN I. HATCH, UNIT I	DOCKET NUMBER (2) 0 5 0 0 0 3 2 1 1	PAGE (3) 1 OF 03
---	--	---------------------

TITLE (4)
GRID FLUCTUATIONS CAUSE UNPLANNED ESF ACTUATION DURING REFUELING OUTAGE

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)
0	1	30	86	86	0	0	5	0			0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)											
POWER LEVEL (10) 0 1 0 0	20.402(b)			20.406(e)			<input checked="" type="checkbox"/> 50.73(a)(2)(iv)			73.71(b)		
	20.406(a)(1)(i)			50.36(a)(1)			50.73(a)(2)(v)			73.71(e)		
	20.406(a)(1)(ii)			50.36(a)(2)			50.73(a)(2)(vii)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
	20.406(a)(1)(iii)			50.73(a)(2)(i)			50.73(a)(2)(viii)(A)					
	20.406(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(viii)(B)					
	20.406(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(ix)					

LICENSEE CONTACT FOR THIS LER (12)									
NAME Raymond D. Baker, Nuclear Licensing Manager - Hatch							TELEPHONE NUMBER 4 0 4 5 2 6 7 0 1 6		

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)							EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)							<input checked="" type="checkbox"/> NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 01/30/86 at approximately 0125 CST with Unit 1 shutdown for a refueling outage and with no fuel in the vessel, the "A" Reactor Protection System (RPS) Alternate Power Supply Bus Breakers tripped. This resulted in the actuation of multiple Engineered Safety Features (ESFs) as detailed in the narrative.

The "A" RPS Alternate Power Supply Bus Breakers tripped when the RPS Alternate Power Supply Bus voltage sensing circuitry responded to voltage fluctuations on that bus. The RPS Alternate Power Supply Bus was being fed from the system grid (normal supply for that bus) which at the time of this event was experiencing voltage fluctuations due to normal system demands.

To prevent recurrence of this type of event, a voltage regulator will be installed during a future refueling outage to supply relatively constant voltage to the RPS Alternate Power Supply bus.

This event did not adversely affect plant safety or the health and safety of the public.

Similar events were last reported via LER 50-321/1985-050, Revisions 0 and 1.

8603100679 860228
PDR ADDCK 05000321
S PDR

IE 22
1/1

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) EDWIN I. HATCH, UNIT I	DOCKET NUMBER (2) 0 5 0 0 0 3 2 1	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 6	- 0 0 5	- 0 0	0 2	OF

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

This 30 day LER is required by 10CFR 50.73(a) (2) (iv) because the loss of the "A" Reactor Protection System (RPS) supply bus power resulted in multiple Engineered Safety Features (ESF) actuations.

On 01/30/86 with Unit 1 shutdown for a refueling outage and with no fuel in the vessel, manual and automatic scram signals had been intentionally generated in order to allow for pre-planned replacement of RPS relays. At approximately 0125 CST, the "A" Reactor Protection System (RPS) Alternate Power Supply Bus Breakers tripped. The Alternate Power Supply was being used because the Normal Power Supply (the "A" RPS motor/generator set) was out of service for pre-planned maintenance.

When the alternate power supply bus breakers tripped the following ESF actuations occurred when the "A" RPS channel scram logic activated on loss of power:

- a) Drywell equipment drain sump discharge inboard isolation valve G11-F019 isolated (group 2).
- b) Drywell floor drain sump discharge inboard isolation valve G11-F003 isolated (group 2).
- c) The "A" train of the standby gas treatment system automatically started.
- d) The main control room environmental system isolated.
- e) Main steam line radiation monitors D11-K603A and D11-K603C went to their fail safe condition (tripped) on loss of supply voltage.

The Alternate Power Supply Bus Breakers tripped when the "A" RPS Alternate Power Supply Bus voltage sensing circuitry responded to voltage fluctuations on that bus. The "A" RPS Alternate Power Supply Bus was being fed from the system grid (normal supply for this bus), which at the time of this event, was experiencing voltage fluctuations caused by normal system demands.

At approximately 0135 CST on 01/30/86, power was restored to the "A" RPS bus by closing the Alternate Power Supply Bus breakers. The affected ESF systems were then immediately returned to normal status.

To preclude recurrence of this type event, a voltage regulator will be installed during a future refueling outage to supply relatively constant voltage to the RPS Alternate Power Supply Bus. The proposed type of voltage regulator is presently in service on the Unit 2 RPS Alternate Power Supply Bus, and has apparently prevented grid voltage fluctuations from resulting in similar unplanned ESF actuations on Unit 2.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) EDWIN I. HATCH, UNIT I	DOCKET NUMBER (2) 0 5 0 0 0 3 2 1	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 6	- 0 0 5	- 0 0	0 3	OF	0 3

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

The subject ESF actuations occurred, by design for a loss of power to the "A" channel RPS logic while the unit was in a refueling outage with no fuel in the reactor vessel. Therefore, this event did not adversely affect plant safety or the health and safety of the public.

Similar events where the Unit experienced ESF actuations as the result of loss of power on the "B" RPS Alternate Power Supply Bus due to grid voltage fluctuations is described in LER 50-321/1985-050, Revisions 0 and 1.

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-6526

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

L. T. Gucwa
Manager Nuclear Safety and
Licensing Department



Georgia Power

the southern electric system

SL-411
0166C

February 28, 1986

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

Attached is Licensee Event Report 50-321/1986-005. This report meets the reporting requirements of 10 CFR 50.73(a)(2)(iv).

Very truly yours,

for L. T. Gucwa

CBS/lc

Attachment

c: Mr. J. T. Beckham, Jr.
Mr. H. C. Nix, Jr.
NRC-Region II
GO-NORMS

IE22
/1