

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)						DOCKET NUMBER (2)								PAGE (3)										
Joseph M. Farley - Unit 2						0 5 0 0 0 3 6 4 1 OF 0 2																		
TITLE (4)																								
Reactor Trip																								
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	3	2	7	8	4	8	4	-	0	0	4	-	0	0	0	4	1	9	8	4	0 5 0 0 0 1			
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																					
1			20.402(b)				20.406(c)				X	60.73(a)(2)(iv)				73.71(b)								
POWER LEVEL (10)			1 0 0				20.406(a)(1)(i)					60.73(a)(2)(v)				73.71(e)								
			20.406(a)(1)(ii)				60.36(a)(2)					60.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 365A)								
			20.406(a)(1)(iii)				60.73(a)(2)(i)					60.73(a)(2)(viii)(A)												
			20.406(a)(1)(iv)				60.73(a)(2)(ii)					60.73(a)(2)(ix)(B)												
			20.406(a)(1)(v)				60.73(a)(2)(iii)					60.73(a)(2)(x)												
LICENSEE CONTACT FOR THIS LER (12)																								
NAME												TELEPHONE NUMBER												
W. G. Hairston, III												AREA CODE 2 0 5 8 9 9 - 5 1 5 6												
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUF- ACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUF- ACTURER	REPORTABLE TO NPRDS														
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR								
YES (If yes, complete EXPECTED SUBMISSION DATE): X NO																								
ABSTRACT (Limit to 1400 spaces i.e. approximately fifteen single-space typewritten lines) (16)																								

At 1247 on 3-27-84, the reactor tripped from 100% power due to a power range neutron high flux negative rate. This was caused by all control rods dropping into the core due to a voltage surge, caused by severe lightning, which tripped the primary and backup 25 VDC power supplies to all four rod control power cabinets. The reactor trip breakers opened due to the high negative rate. Health/safety of the public was not affected.

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PDR ADOCK 05000364
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Joseph M. Farley - Unit 2	0 5 0 0 0 3 6 4	8 4	0 0 4	0 0	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 365A's) (17)

On 3-27-84, during steady state operation with the unit in Mode 1 at 100% power and severe thunderstorms in the area, several lightning strikes occurred on the plant site. A voltage surge was experienced which tripped both the primary and backup 25 VDC power supplies to all four rod control power cabinets. This resulted in all control rods dropping into the core resulting in a power range neutron high flux negative rate condition. The reactor trip breakers opened at 1247 on 3-27-84 due to this signal.

The plant operators implemented FNP-2-EOP-5 (Reactor Trip) placing the unit safely in Mode 3. All safety systems functioned as designed.

The lightning caused a voltage surge in the plant's AC distribution system. The resulting voltage spike caused the overvoltage protection devices to trip the primary DC power supplies which are powered from the AC distribution system. Due to the close proximity of the primary and backup power supply cables, it is thought that capacitive coupling caused the overvoltage protection devices to trip the backup power supplies which are powered from the motor-generator sets. The power supplies were reset and a normal startup was conducted.

An engineering evaluation of possible solutions to prevent recurrence will be performed.

Mailing Address

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6081

F. L. Clayton, Jr.
Senior Vice President
Flintridge Building



Alabama Power

the southern electric system

April 19, 1984

Docket No. 364

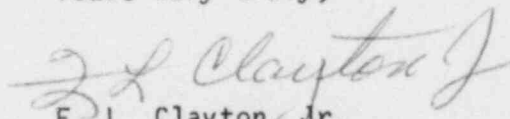
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Washington, D.C. 20555

Dear Sir:

Joseph M. Farley Nuclear Plant, Unit 2, Licensee Event Report No. LER 84-004-00 is forwarded in accordance with 10CFR50.73 to provide 30 day written notification of this occurrence. This report was prepared using a draft version of IEEE Std. 805-1984 since a final version has not been published.

If you have any questions, please advise.

Yours very truly,


F. L. Clayton, Jr.

FLCJr/DSM:sam

Enclosures

xc: IE, Region II

IE22
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