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W. G. Hairston, III
Senior Vice President
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the southern electric system

ELV-00693
1527n

July 14, 1989

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

PLANT VOGTLE - UNIT 2
NRC DOCKET 50-425
OPERATING LICENSE NPF-81
LICENSEE EVENT REPORT
POTENTIAL OPERATION ABOVE MAXIMUM POWER LEVEL
SPECIFIED IN OPERATING LICENSE

Gentlemen:

In accordance with 10 CFR 50.73, Georgia Power Company hereby submits the enclosed report related to an event which occurred on June 15, 1989.

Sincerely,

C.K. McCoy FOR

W. G. Hairston, III

WGH,III/PAH/gm

Enclosure: LER 50-425/1989-022

xc: Georgia Power Company
Mr. C. K. McCoy
Mr. G. Bockhold, Jr.
Mr. M. Sheibani
Mr. J. P. Kane
NORMS

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

IE22
1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

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

TITLE (4)
POTENTIAL OPERATION ABOVE MAXIMUM POWER LEVEL SPECIFIED IN OPERATING LICENSE

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 5 0 0 0
0 6	1 5	8 9	8 9	— 0 2 2 —	0 0	0 7	1 4	8 9		0 5 0 0 0

OPERATING MODE (9): 1
POWER LEVEL (10): 1 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

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)	X OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	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	4 0 4 8 2 6 - 3 2 0 1

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)

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

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

On June 15, 1989, Georgia Power Company determined that between May 27 and June 14, 1989 Unit 2 had potentially been operated above the maximum power level (3411 MW_t) specified in Operating License NPF-81, Section 2.C due to calorimetric instrument errors. This determination is based on an increase in indicated reactor power observed on June 14, 1989 during preparations for the ASME performance test on Unit 2. When temporary high precision flow transmitters were vented, indicated reactor power on the process computer increased from 3411 MW_t to 3427 MW_t. Following the increase in indicated reactor power, the plant operator reduced indicated reactor power to below 3411 MW_t (approximately 10 minutes after the indicated thermal power increased). Subsequent investigations indicated that the reactor may have been operating at a rated thermal power greater than that permitted by the operating license.

The suspected causes for this event are improper venting of the feedwater flow transmitters and drift in the common power supply for the feedwater temperature transmitters.

Corrective actions included an immediate reduction of reactor power, venting of the feedwater flow instrument sensing lines, replacement of a drifting power supply and recalibration of selected instruments which input to the process computer reactor thermal power indication.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6) YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	PAGE (3)
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

A. REQUIREMENT FOR REPORT

The Plant Vogtle Unit 2, Facility Operating License No. NPF-81, Section 2.H, requires Georgia Power Company to report any violation of Section 2.C. Plant Vogtle Unit 2 may have operated above the licensed maximum power level of 3411 MW_t.

B. UNIT STATUS AT TIME OF EVENT

The unit was in Mode 1 (Power Operation) at 100% of Rated Thermal Power (RTP), as indicated by U1118 (computer calculated calorimetric).

C. DESCRIPTION OF EVENT

On June 14, 1989, a reactor power anomaly was observed during preparations for the ASME performance test for Unit 2. During venting of the temporary precision feedwater flow transmitters (installed in parallel with the permanent plant transmitters) in accordance with Procedure T-ENG-89-09, indicated reactor power increased from 3411 MW_t to 3427 MW_t. Reactor power was reduced to below 3411 MW_t as indicated by process computer within ten minutes.

On June 15, 1989, an evaluation was initiated to establish the cause of the indicated increase in reactor power and to determine if an actual overpower condition had existed. This evaluation included a review of other power indications such as reactor core differential temperature (delta T), gross electrical power output corrected for changes in circulating water temperature and steam flow. These parameters were compared prior to the event, after the reduction of indicated power, after final recalibration of selected inputs to the reactor thermal power computer point (U1118), and subsequent to the increase of indicated reactor thermal power back to 3411 MW_t. Due to the very small suspected overpower condition and the normal data scatter, this evaluation did not establish with certainty that a overpower condition had existed. However, since some parameters did indicate a potential overpower condition, the time frame over which the potential condition could have existed (May 27, 1989 to June 14, 1989) was established and the event was reported in accordance with section 2.H of the operating license.

*U.S. GPO: 1988-520-589:00070

D. CAUSE OF EVENT

Although it was not conclusively determined that an actual overpower condition had occurred, errors in two input signals (feedwater temperature and feedwater flow) were determined to be the cause of the small shift in reactor thermal power as indicated by the plant process computer.

E. ANALYSIS OF EVENT

A review of reactor data demonstrated that none of the reactor trip limits were approached. Although the licensed power limit may have been exceeded, this event did not result in the nuclear plant being in an unanalyzed condition. The plant was not operated above 102% of Rated Thermal Power. A review of the operating data also indicates the reactor safety limits shown in Technical Specification Figure 2.1-1 were not exceeded. Based on these considerations, there was no adverse affect on plant safety or public health and safety as a result of this event.

F. CORRECTIVE ACTIONS

The following corrective actions have been performed:

(1) Properly vented all sensing lines on the Unit 2 feedwater flow transmitter.

(2) Recalibrated the final feedwater computer points.

(3) Replaced a drifting power supply for the feedwater temperature transmitters.

The following action was taken for Unit 1 even though this event did not occur on Unit 1.

(1) Ensured that sensing lines were properly vented.

The following are long-term corrective actions:

(1) A review of the Preventive Maintenance Program will be completed by 8-1-89 to ensure that the instruments that provide input to U1118 are calibrated at the appropriate frequency.

G. ADDITIONAL INFORMATION

1. Failed Components
   None

2. Similar Event
   LER-87-69, "Operating Above The Maximum Power Level Specified In Operating License".

   The cause of this LER 87-69 was the plant was being controlled based upon indication of the NIs. The corrective action taken in LER 87-69 would not have prevented the LER condition described in LER 89-22 from occurring. The root cause of this LER 89-22 was determined to be errors in two input signals (feedwater temperature and feedwater flow) which caused the small shift in indicated reactor thermal power.

3. Energy Industry Identification System Code:
   Reactor Core - AC
   Feedwater - SJ
   Plant Computer - ID