NRC FORM 366

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | G A E I H 2 (2) | 0 0 - 0 0 0 0 0 - 0 0 (3) | 4 1 1 1 1 (4) | (5)
LICENSEE CODE | LICENSE NUMBER | LICENSE TYPE | CAT

CON'T 01 | REPORT SOURCE L (6) | 0 5 0 0 0 3 6 6 (7) | 0 2 2 3 8 1 (8) | 0 3 1 7 8 1 (9)
DOCKET NUMBER | EVENT DATE | REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 At 0645 hours with mode switch in RUN during initial startup following
03 refueling at 46% power, the Rx engineer observed CMFLPD to be greater than
04 FRTP. Attempts to reduce the relative power or adjust the APRMs within
05 the required time limit were unsuccessful. The shift foreman was notified
06 and plans were made to be less than 25% power within 4 hrs if not cor-
07 rected. Subsequently adjusted pattern and APRMs at 1004. There were no
08 effects upon public health or safety. This is a repetitive event (LER 50-366/80-91).

09 SYSTEM CODE: Z Z (11) | CAUSE CODE: A (12) | CAUSE SUBCODE: X (13) | COMPONENT CODE: Z Z Z Z Z Z (14) | COMP. SUBCODE: Z (15) | VALVE SUBCODE: Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 8 1 | — | SEQUENTIAL REPORT NO. 0 0 3 | / | OCCURRENCE CODE 0 3 | REPORT TYPE L | — | REVISION NO. 0

ACTION TAKEN: E (18) | FUTURE ACTION: H (19) | EFFECT ON PLANT: Z (20) | SHUTDOWN METHOD: Z (21) | HOURS (22): 0 0 0 0 | ATTACHMENT SUBMITTED: Y (23) | NPRD-4 FORM SUB.: N (24) | PRIME COMP. SUPPLIER: Z (25) | COMPONENT MANUFACTURER: Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The cause of the event has been attributed to time delays for adjusting
11 rods, running TIP scans, and processing time for the computer. The en-
12 gineer continued to adjust the rod pattern and improve the computer
13 accuracy until 1004 CST when the APRMs were adjusted as required by Tech
14 Specs. All Rx engineers informed of event in effort to preclude recurrence.

15 FACILITY STATUS: C (28) | % POWER: 0 4 6 (29) | OTHER STATUS (30): NA | METHOD OF DISCOVERY: A (31) | DISCOVERY DESCRIPTION (32): Reactor Engineer Observation

16 ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): NA | LOCATION OF RELEASE (36): NA

PERSONNEL EXPOSURES
17 NUMBER: 0 0 0 (37) | TYPE: Z (38) | DESCRIPTION (39): NA

PERSONNEL INJURIES
18 NUMBER: 0 0 0 (40) | DESCRIPTION (41): NA

LOSS OF OR DAMAGE TO FACILITY (43)
19 TYPE: Z (42) | DESCRIPTION: NA

PUBLICITY
20 ISSUED: N (44) | DESCRIPTION (45): NA | NRC USE ONLY

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NAME OF PREPARER: C. L. Coggin, Supt. Plt. Eng. Serv. PHONE: 912-367-7781

LER #: 50-366/1981-003
Licensee: Georgia Power Company
Facility Name: Edwin I. Hatch
Docket #: 50-366

Narrative Report
for LER 50-366/1981-003

On 2-23-81, at 0645 hours with the mode switch in RUN during initial startup following unit refueling, operations personnel were attempting to pull control rods to target pattern when the reactor engineer observed that CMFLPD was greater than FRTP. Attempts were made to raise overall power with respect to the local area of high peaking by pulling several rod groups. After updating the base distribution and obtaining a computer analysis the CMFLPD/FRTP was still excessive, and rod groups in the region were inserted to suppress the excessive peaks. At this point TIP traces were obtained from the adjacent channels, and a computer analysis was demanded; however, the two-hour time limit required by Tech Specs 3.2.2 had expired. The engineer inserted these rods further and continued to improve the base distribution by TIP traces adjacent to the failed LPRM sensors, and at 1004 hours the APRMs were adjusted to CMFLPD to comply with Tech Specs.

There were no effects upon public health and safety due to this event. This event is repetitive as last reported on LER 50 366/1980 091.

Adjusting the rod pattern to change core parameters is an iterative process involving rod movements, TIP scans, and processing of the data by the computer to calculate the new values. In extreme cases one iteration of the process can take 45 minutes to one hour. Therefore, essentially the engineer has time for two adjustments before the two hour limit has expired. In some cases, as above, the rod pattern changes are insufficient to allow APRM adjustments. These situations generally occur during xenon free startups where less than optimum rod patterns are attained.

All the reactor engineers have been informed of the details of the event with suggestions to preclude further recurrence.