

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-3195

Mailing Address
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 868-5581

the southern electric system

W. G. Hairston, III
Senior Vice President
Nuclear Operations

HL-1353
001282

November 15, 1990

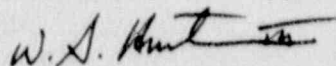
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

PLANT HATCH - UNIT 2
NRC DOCKET 50-366
OPERATING LICENSE NPF-5
SPECIAL REPORT 2-90-003
FIRE-RATED ASSEMBLIES INOPERABLE WITHOUT AN HOURLY
FIRE WATCH MAINTAINED RESULTS IN
SPECIAL REPORT AS REQUIRED BY FIRE HAZARDS ANALYSIS

Gentlemen:

In accordance with the requirements of the Unit 2 Technical Specifications and the Fire Hazards Analysis (FHA), Appendix B, Georgia Power Company is submitting the enclosed Special Report concerning an event where a fire rated assembly was inoperable without a continuous fire watch. This event occurred at Plant Hatch - Unit 2.

Sincerely,


W. G. Hairston, III

WTB/et

Enclosure: SR 50-366/1990-003

c: (See next page.)

9011270120 901115
PDR ADOCK 05000366
S PDC

IE22
41

U.S. Nuclear Regulatory Commission
November 15, 1990
Page Two

c: Georgia Power Company
Mr. H. L. Sumner, General Manager - Nuclear Plant
Mr. J. D. Heidt, Manager Engineering and Licensing - Hatch
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II
Mr. S. D. Ebnetter, Regional Administrator
Mr. L. D. Wert, Senior Resident Inspector - Hatch

ENCLOSURE

PLANT HATCH - UNIT 2
NRC DOCKET 50-366
OPERATING LICENSE NPF-5
SPECIAL REPORT 2-90-003
FIRE-RATED ASSEMBLIES INOPERABLE WITHOUT AN HOURLY
FIRE WATCH MAINTAINED RESULTS IN
SPECIAL REPORT AS REQUIRED BY FIRE HAZARDS ANALYSIS

A. REQUIREMENT FOR REPORT

This special report is required by the Plant Hatch Unit 2 Technical Specifications (TS), Section 6.9.2, and the Plant Hatch Fire Hazards Analysis, Appendix B, Section 1.1.1. Specifically, TS Section 6.9.2 states:

"Special reports for fire protection equipment operating and surveillance requirements shall be submitted, as required, by the Fire Hazards Analysis (FHA) and its Appendix B requirements."

FHA Appendix B, Section 1.1.1 states:

"Fire-rated assemblies and sealing devices in fire-rated assembly penetrations separating safety-related fire areas or separating portions of redundant systems important to safe shutdown within a fire area shall be OPERABLE."

Furthermore, Section 1.1.1, Table 1.1-2, lists the Unit 2 fire doors and identified doors to which the specification applies. Action Statement (a) of Appendix B, Section 1.1.1, allows the fire rated assembly and/or sealing devices to be inoperable for up to 14 days provided, within one hour, a continuous fire watch on at least one side of the affected assembly(s) and/or sealing device(s) is established, or the operability of fire detectors on at least one side of the inoperable barrier is verified and an hourly fire watch patrol is established. Action Statement (b) states that, if the 14-day time limit is exceeded, a special report must be submitted to the NRC within 30 days.

This special report describes a condition in which two Unit 2 fire doors were inoperable without the required hourly fire watch being maintained.

B. UNIT STATUS AT TIME OF EVENT

On 10/18/90, at approximately 0730 CDT, Unit 1 was in the Run mode at an approximate power level of 2436 MWt (approximately 100 percent of rated thermal power), and Unit 2 was in the Run mode at an approximate power level of 2436 MWt (approximately 100 percent of rated thermal power).

ENCLOSURE (Continued)

SPECIAL REPORT 2-90-003
FIRE-RATED ASSEMBLIES INOPERABLE WITHOUT AN
FIRE WATCH MAINTAINED RESULTS IN
SPECIAL REPORT AS REQUIRED BY FIRE HAZARDS ANALYSIS

C. DESCRIPTION OF EVENT

On 10/18/90, at approximately 0730 CDT, fire doors 2C05 and 2C05A were blocked open to allow use of a portable filtration and de-watering unit to clean the oil in the main turbine lube oil storage tanks 2N34-A001A and B. Fire doors 2C05 and 2C05A are UL class A sliding fire doors located on the inside and outside, respectively, of the wall separating the Unit 2 oil storage room, Control Building elevation 112, and the working floor, Control Building elevation 112. FHA Appendix B, Section 1.1.1 and Table 1.1-2 do not require the establishment of a fire watch when fire doors 2C05 and 2C05A are inoperable. However, licensed plant operations personnel on shift at that time initiated Limiting Condition for Operation (LCO) 2-90-323 and began an hourly fire watch.

On 10/19/90 at approximately 0510 CDT, the same licensed plant operations personnel realized that the requirements of FHA Appendix B, Section 1.1.1 and Table 1.1-2 were not applicable to fire doors 2C05 and 2C05A. Consequently, LCO 2-90-323 was terminated and the fire watch discontinued.

On 10/24/90, plant Safety Audit and Engineering Review personnel questioned an apparent discrepancy between the FHA requirements for fire doors 2C05 and 2C05A and comparable Unit 1 fire doors. The portable filtration and de-watering unit had been in service and fire doors 2C05 and 2C05A blocked open without a fire watch established since LCO 2-90-323 was terminated on 10/19/90. In response to the concern, LCO 2-90-332 was initiated and the fire watch was re-established at approximately 1135 CDT. An engineering review of FHA Appendix B, Section 1.1.1 requirements was also initiated.

On 10/24/90 at approximately 1530 CDT, engineering personnel determined that the LCO and fire watch requirements were, in fact, applicable to fire doors 2C05 and 2C05A. Consequently, fire doors 2C05 and 2C05A had been inoperable from 0510 CDT on 10/19/90 to 1135 CDT on 10/24/90 without an hourly fire watch as required per FHA Appendix B, Section 1.1.1, Action Statement a, thereby necessitating this report.

The continuing engineering review indicated that there were other discrepancies in FHA Appendix B, Table 1.1-2, and the problem also extended to the Unit 1 and common fire door listing in Table 1.1-1. Therefore, on 11/1/90 Operating Order Number 00-02-1090S was issued requiring that all fire doors listed in Tables 1.1-1 and 1.1-2, whether designated as Appendix B fire doors or not, be considered subject to the

ENCLOSURE (Continued)

SPECIAL REPORT 2-90-003
FIRE-RATED ASSEMBLIES INOPERABLE WITHOUT AN
HOURLY FIRE WATCH MAINTAINED RESULTS IN
SPECIAL REPORT AS REQUIRED BY FIRE HAZARDS ANALYSIS

operating requirements of FHA Appendix B, Section 1.1.1. The engineering review, completed on 11/2/90, showed that approximately 60% of the fire doors on Tables 1.1-1 and 1.1-2 had been removed from the operating and surveillance requirements of FHA Appendix B, Section 1.1.1 without adequate justification.

D. CAUSE OF EVENT

The root cause of this event is cognitive personnel error by the preparers of a revision to FHA Appendix B in interpreting FHA Appendix B, Section 1.1.1 requirements. In February, 1989, Document Change Request (DoCR) 89-04 was initiated for a general revision to FHA Section 9.2, Appendix B. This DoCR improperly revised Section 1.1.1 text, and Tables 1.1-1 and 1.1-2, to add indication by an asterisk (*) and so designate specific doors to which the requirements of FHA Appendix B, Section 1.1.1 apply. This was done in an attempt to reduce unnecessary surveillances. Fire doors 2C05 and 2C05A were among those doors for which this specification was not identified as applicable (i.e., no asterisk).

E. ANALYSIS OF EVENT

In this event, the fire doors separating the Control Building elevation 112 working floor from the Unit 2 oil storage room were inoperable without the required compensatory measures taken.

The FHA provides the analysis for safe shutdown of Unit 1 and 2 for a fire in the working area of the Control Building, elevation 112. There are no safe shutdown components or circuits for Unit 1 or 2 in the Unit 2 oil storage room. The Unit 2 oil storage room is provided with a full coverage dry pilot activated, auto deluge system. The only significant fire which can be postulated for this area would be as a result of the rupture of the oil storage tank or piping. The full coverage auto deluge system provides for rapid extinguishment of any fire which would occur.

ENCLOSURE (Continued)

SPECIAL REPORT 2-90-003
FIRE-RATED ASSEMBLIES INOPERABLE WITHOUT AN
HOURLY FIRE WATCH MAINTAINED RESULTS IN
SPECIAL REPORT AS REQUIRED BY FIRE HAZARDS ANALYSIS

The auto deluge system was operable during the time that the compensatory requirements for the fire doors were not met. Activation of the deluge system results in an alarm locally and in the Main Control Room, providing for a rapid response of the plant fire brigade to protect sensitive equipment located in the working area of the Control Building elevation 112.

The working floor of the Control Building elevation 112 is equipped with smoke detection in the west half of the area, which is adjacent to the Unit 2 oil storage room. Fire fighting equipment includes hose stations, portable CO2 and dry chemical fire extinguishers located throughout the area, and a portable foam unit.

The detection system and fire fighting equipment were operable during the time that the surveillance requirements for the fire doors were not met. The detection system will detect a fire and alert the Main Control Room to ensure prompt response by the plant fire brigade. The available fire fighting equipment is adequate to extinguish the fire.

It is likely that other fire doors on Table 1.1-1 and 1.1-2 of FHA Appendix B, which were improperly designated as not subject to the Section 1.1.1 requirements may have been blocked open during the time since the FHA revision (implemented in July, 1989). However it is likely that the doors would have been blocked open during the course of normal maintenance or outage related activities. Personnel involved in the activities would probably have been present during the majority of the time any doors were blocked open to detect and respond to any incidence of fire.

Therefore, it can be concluded that this event had no adverse impact on nuclear safety. The above analysis is applicable at all power levels.

F. CORRECTIVE ACTIONS

The corrective actions for this event include the following:

1. LCO 2-90-332 was initiated and the required fire watch was in place for the remaining duration that fire doors 2C05 and 2C05A were blocked open.

ENCLOSURE (Continued)

SPECIAL REPORT 2-90-003
FIRE-RATED ASSEMBLIES INOPERABLE WITHOUT AN
HOURLY FIRE WATCH MAINTAINED RESULTS IN
SPECIAL REPORT AS REQUIRED BY FIRE HAZARDS ANALYSIS

2. Operating Order Number 00-02-1090S was issued on 11/1/90 to the Unit 1 and 2 Shift Supervisors requiring that all fire doors on Table 1.1-1 for Unit 1 and Table 1.1-2 for Unit 2 in FHA Appendix B be considered subject to the operating requirements of FHA Appendix B, Section 1.1.1.
3. The individuals responsible for initiating the revision no longer work at Plant Hatch and consequently no counseling was required. The individuals responsible for development and review of the Document Change Request have been counseled.
4. An engineering review of the requirements in FHA Appendix B, Section 1.1.1, and applicability to all fire doors in Tables 1.1-1 and 1.1-2, was completed on 11/2/90.
5. Revision 6B of the FHA will correctly identify all fire doors subject to the operating requirements of FHA Appendix B, Section 1.1.1 and will be issued by the end of January 1991.
6. A sampling of DoCRs generated over the last three years which affected the FHA will be reviewed by 1/16/91 for correctness and to confirm that this is an isolated occurrence.
7. Procedures will be changed by 1/11/91 to require an architect/engineer review of any future FHA Appendix B Document Change Request (DoCRs) prior to the Plant Review Board submittal.