



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-321/92-09 and 50-366/92-09

Licensee: Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

Docket Nos.: 50-321 and 50-366

License Nos.: DPR-57 and NPF-5

Facility Name: Hatch Units 1 and 2

Inspection Conducted: April 6 - 10, 1992

Inspector: W. H. Miller, Jr.
W. H. Miller, Jr., Project Engineer

4-15-92
Date Signed

Approved by: P. A. Stennis, Jr.
G. A. Belisle, Chief
Reactor Projects Section 3A
Division of Reactor Projects

4-17-92
Date Signed

SUMMARY

Scope: This routine unannounced inspection was conducted to evaluate the plant's fire protection/prevention implementation program and to follow-up on previous inspection findings.

Results: Within the areas examined, violations or deviations were not identified. The licensee had taken positive steps towards resolving the violations, concerns and weaknesses identified during the November 1991 NRC inspection of the Fire Protection Program (Paragraph 3). The recent installation of a dedicated telephone number in the control room for receipt of emergency telephone calls is a strength (Paragraph 2.d).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- S. Angell, Fire Protection Engineer
- *J. Bennett, Plant Training Supervisor
- *J. Betsill, Acting Operations Manager
- K. Breitenbach, Acting Engineering Support Manager
- *C. Coggin, Training and Emergency Preparedness Manager
- M. Dean, Nuclear Specialist (Fire Protection)
- P. Fornel, Maintenance Manager
- *O. Fraser, Safety Audit And Engineering Review Supervisor
- *J. Hammonds, Regulatory Compliance Supervisor
- M. Keating, Engineer, Fire Protection Group
- *R. King, Acting Supervisor, Engineering Support
- *B. Matthews, Senior Nuclear Specialist, Southern Nuclear Company
- *T. Moore, Acting Assistant General Manager - Plant Support
- *H. Sumner, General Manager - Nuclear Plant
- *J. Thompson, Plant Engineering Supervisor (Fire Protection)
- S. Tipps, Nuclear Safety and Compliance Manager

Other licensee employees contacted included technicians, operators, mechanics, security force members, and staff engineers.

NRC Resident Inspectors:

- R. Mussler
- L. Wert

*Attended exit interview.

2. Fire Protection/Prevention Program (64704)

The inspector evaluated the overall adequacy and implementation of the licensee's Fire Protection Program and followed up on the findings identified during the previous fire protection inspection conducted November 18 - 22, 1991 (NRC Inspection Report Nos. 50-321, 366/91-30). The Hatch Fire Protection Program is described in a document entitled the Fire Hazard Analysis (FHA) which is a supplement to the Final Safety Analysis Report (FSAR)

a. Surveillance of Fire Protection Features

The surveillance requirements to verify operability of the fire protection systems are listed in Appendix B of the FHA. These requirements were formerly included in the Technical Specifications (TS).

The inspector compared the surveillance and operability requirements for the fire protection systems listed in the FHA with those formerly included in the TS. In general, the TS and FHA requirements were found to be consistent. The principle changes which were incorporated into the FHA were reviewed and approved by NRR by License Amendment Nos. 133 and 70 for Units 1 and 2 respectively. Several additional changes have recently been made to the FHA operability requirements. These were incorporated using the normal licensee's document change request (DCR) procedures. The following DCRs were reviewed:

- DCR 89-04, Major changes to FHA due to plant modifications and NRC commitments.
- DCR 89-05, Extend time requirements for emergency lighting units to be restored to operable status.
- DCR 89-13, Change the type fire detectors for the diesel generator switchgear rooms.

These were reviewed by the inspector to verify that appropriate review and evaluations were being performed on the FHA changes. Discrepancies were not noted, except for the specified testing frequency of the smoke detectors. This item was previously identified as a violation (Item 321, 366/91-30-01) in NRC Inspection Report 50-321, 366/91-30 and appropriated corrective action is in process.

During the previous 1991 inspection, the inspector noted that some of the permanently installed instrumentation used for surveillance testing of the fire protection systems did not appear to be included in a calibration program. This was identified as a program weakness. To resolve this weakness, the licensee is evaluating all fire protection systems and test procedures to identify permanently installed instrumentation which is used to verify system operability. These instruments are to be reviewed to determine the assigned calibration program for each instrument. This investigation will be completed by July 28, 1992. Following this investigation, an evaluation will be performed and completed by late 1992, to assign each instrument to an appropriate calibration program. Completion of this program will resolve this program weakness.

b. Fire Brigade Equipment

Fire brigade turnout gear and equipment are stored in various equipment storage areas located in strategic locations throughout the plant. The principle equipment included:

Equipment	Fire Stge.			
	Control Bldg.	Switchyard	Bldg.	Whse. 1
Turnout Gear(1)	12	8	12	10
SCBA	10	5	15(2)	5
Smoke Ejectors	4	2	2	3
Foam Maker			1	1
Foam-5 gal. ca.			20	22
Radios	4		5	
Deluge sets			5	

- Notes: (1) Includes coats, pants, helmets, boots, gloves, hand lights, etc.
 (2) A total of 160 extra SCBA bottles are stored at this location.

The fire brigade equipment was inspected and found to be properly stored and well maintained.

During the previous inspection, the inspector noted that the licensee had recently obtained a fire brigade equipment transport vehicle which was to be assigned solely for fire brigade use. This vehicle has not been placed in service. However, when this vehicle is placed in service it will carry approximately 900 feet of 2-1/2 inch and 600 feet of 1-1/2 inch fire hose, 6 self-contained breathing apparatus with 40 spare cylinders (bottles), 90 gallons of foam and foam appliances, 3 smoke ejectors, a portable generator, master stream discharge nozzle and miscellaneous supplies and equipment. This dedicated vehicle, although approximately 18 years old, will provide an improvement in the movement of fire fighting equipment and personnel to fires located outside the main power block structure but in the protected and owner controlled areas of the plant.

c. Fire Fighting Preplans

A total of 520 pre-fire plans or fire fighting strategies are provided for the various fire areas and zones within the plant property. The fire plans for the following areas were reviewed:

- Fire Area 1205F: Reactor Building Unit 1 Control Rod Drive Area-130' Elevation.
- Fire Area 1211: Motor Generator Room 1A-158' Elevation.

These pre-fire plans are well prepared, user friendly and address the principle fire protection/fire fighting concerns such as direction of fire attack and location of combustibles, fire hazards, and heat sensitive systems.

d. Fire Drill

A fire brigade drill was conducted on April 9, at 4:30 p.m. and was witnessed by the inspector. The drill involved a burning truck in the protected area adjacent to the diesel fuel oil storage tanks for the emergency diesel generators. Response to the fire consisted of: one Fire Captain, one Fire Team Leader, six operational fire brigade members, four fire brigade members from the Fire Emergency Response Group (non-operational employees) and four security personnel for area control. Two 1 1/2-inch attack fire hose lines and two 1 1/2-inch and one 2 1/2-inch fire hose lines were used to combat the simulated fire. The fire brigade responded promptly in full protective clothing with appropriate fire fighting equipment, properly deployed the hose lines, established a command post and effectively used radio communications.

Following the drill, a critique was held with the participants and the drill evaluators discussed the good points and items that could be improved. Overall response to the fire drill and the exercise critique were considered good by both the drill evaluators and the inspector.

The licensee has a dedicated telephone number (3000) to call the control room in the event of an emergency. This helps assure that a free telephone line is available for use in an emergency and is a program strength.

e. Fire Protection Quality Assurance Audits

The inspector reviewed Audit 92-FP-1, Audit of Fire Protection Program, which was performed by the Safety Audit and Engineering Review group and completed on March 20, 1992. This audit included a total of 340 man-hours in audit activities and appeared to be a thorough review and evaluation of the plant's Fire Protection Program. Although the audit considered the Fire Protection Program satisfactory, four items of noncompliance and a number of comments and suggested areas in need of improvements were identified. The following two major issues were addressed: an apparent uncertainty concerning the specific fire protection commitments for Plant Hatch; and a lack of clear understanding as to the ownership of the Fire Protection Program. These items are being reviewed by the licensee to determine the appropriate actions required.

f. Plant Tour

A general plant walkdown inspection was performed by the inspector to verify: acceptable housekeeping; compliance with the plant's fire prevention procedures such as "Hot Work" permits and transient combustibles; operability of the fire detection and suppression systems; and, installation and operability of fire barriers, fire stop and penetration seals (fire doors, dampers, electrical penetration seals, etc.).

Within the areas inspected, the general housekeeping was satisfactory. The housekeeping for the diesel generator rooms was very good. There was no apparent excessive leakage of lubrication oil and diesel fuel from the diesel engines and the engines and floors were apparently wiped down to remove any leaks that were present. The housekeeping for the motor generator set rooms was also satisfactory. Although there were several small oil leaks from the equipment, the leaks were being properly controlled and the equipment appeared to be wiped down frequently to eliminate any appreciable accumulations of oil. Overall, the control of combustible and hazardous materials and flammable and combustible liquids and gases was satisfactory.

During the plant tour, the inspector noted that the four engine-driven portable lighting units formerly provided to meet the Appendix R emergency lighting requirements for the service water valve pits had been removed. These lights are listed as an exemption justification in FHA Section 11.6 (pages 11.6-2 and 11.6-8). These lights are no longer required since 8-hour battery powered lighting has been installed for the pits. During this inspection, the licensee submitted Author's Document Incorporated Form No. F8A-002 to revise the FHA to conform to the actual plant configuration. The Fall 1992 revision of the FHA should incorporate this change.

The cable raceway fire barriers for the following raceways were inspected and found to be in service and well maintained:

- Pathway 2 circuits, diesel generator switchgear rooms 1E and 1F (3-hour).
- Pathway 1 circuits, motor control centers 1R24-S018A and 1R24-S0288, Unit 1 Reactor Building-130' elevation (1-hour).
- Pathway 2 circuits, motor control center 2R24-S0128, Unit 2 Reactor Building, chiller room-167' elevation (1-hour).
- Pathway 1 circuits, Valve 1E51-F013, Unit 1 Reactor Building, torus-87' elevation (1-hour).
- Pathway 2 circuits, Valve 2E41-F006, Unit 2 Reactor Building, torus-87' elevation (1-hour).

No violations or deviations were identified.

3. Follow-up on Previous Inspection Findings (92701 and 92702)

- a. (Closed) Violation 321, 366/91-30-01: Failure to Meet the Fire Protection Provisions of the Operating License. The licensee responded to this violation on January 17, 1992. Procedures 40AC-ENG-008-0S and 73TR-TRN-003-0S have been revised to require fire drills at the frequency specified by the NRC guidelines. The fire detectors listed in Appendix B to the FH have all been visually inspected and all of the smoke detectors will be functionally tested by May 1, 1992. The fire detector test procedure and the FHA will be revised by July 31, 1992, to conform to these changes.
- b. (Closed) Inspector Follow-up Item 321, 366/91-30-02: Inadequate Documentation of Medical Examinations for Fire Brigade Members. A Fire Brigade Examination Procedure has been written and is in the final review process. This procedure will require that all fire brigade members receive an appropriate annual medical review to certify that they can perform fire fighting duties. Although this procedure has not been issued, it has been implemented by the Hatch Medical group. The records for all fire brigade members have been reviewed by the medical staff and each member's medical file contains documentation indicating that the member is medically qualified to serve on the plant fire brigade.
- c. (Closed) Unresolved Item 321, 366/91-30-03: Verification that Current Surveillance Tests on Fire Protection Systems Conform to the Commitments Made to the NRC. The inspector made a detailed comparison to the testing requirements for the fire protection systems listed in the TS in effect prior to 1986 and to the testing requirements in Appendix B of the FHA. As a whole, with the exception of the smoke detector tests, the requirements in the FHA were found to conform to the TS requirements or the differences had been reviewed and approved by NRR. The licensee is continuing to review and evaluate the fire protection commitments made to the NRC. Completion of this review is scheduled for late 1992. Therefore, this item is closed.
- d. (Closed) Inspector Follow-up Item 321, 366/91-30-04: Provide Appropriate Review and Documentation on the Removal of the Automatic Fire Suppression Systems Protecting the Charcoal Filter Units. The automatic sprinkler systems for the carbon filter units were changed to manual systems by DCR 87-147. Following the NRC inspection which identified this item, the licensee performed a review and evaluation of this design change and issued a safety evaluation on March 31, 1992. The inspector reviewed this evaluation and found it to adequately address the previous items of concern.

4. Exit Interview

The inspection scope and findings were summarized on April 10, 1992, with those persons indicated in paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.