UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report No. 50-416/81-15

Licensee: Mississippi Power and Light Company
Jackson, Mississippi 39205

Facility Name: Grand Gulf Nuclear Station

Docket No. 50-416

License No. CPRR-118

Inspection at Grand Gulf Nuclear facility near Port Gibson, Mississippi

Inspector: P. A. Taylor for
G. L. Paul

6-3-81
Date Signed

Approved by:
F. S. Cantrell, Section Chief, Resident and
Reactor Project Inspection Division

6/3/81
Date Signed

SUMMARY

Inspection on May 19-22, 1981

Areas Inspected

This routine announced inspection involved 28 inspector-hours onsite in the areas of operating staff training, training programs for non-licensed personnel, and staff qualifications.

Results

Of the three 3 areas inspected, no apparent items of noncompliance or deviations were identified.

DETAILS

1. Pr[illegible] Contacted

   Lic[illegible] sonnel

   *C. K. McCoy, Plant Manager
   *R. A. Ambrosino, Nuclear Support Manager
   *J. Custer, Training and Administrative Supervisor
   *J. Hanton, Training Supervisor
   *D. Mahoney, Quality Assurance
   C. L. Stuart, Assistant Plant Manager

   Other licensee employees contacted included construction craftsmen, technicians, operators, mechanics and office personnel.

   NRC Resident Inspector

   *A. G. Wagner

   *Attended exit interview

2. Exit Interview

   The inspection scope and findings were summarized on May 22, 1981 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

   Not inspected.

4. Unresolved Items

   Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve noncompliance or deviations. New unresolved items identified during this inspection are discussed in paragraph 7.

5. Training Program Non-Licensed Personnel

   Reference:
   a) American National Standard 3.1/1978
   b) Proposed Technical Specifications, Section 6.4
   c) Facility Quality Assurance Manual

   The licensee's training procedures and programs were reviewed for adequacy and compliance with requirements and commitments for the following areas.

   a. General employee training

b. Temporary employee training
c. On-the-job training for technicians, staff, and general employees,
d. Regulatory Guide 8.13

The inspector reviewed training records for eight individuals in the above categories to verify the described training program was provided, and that the individuals actually received the training which was documented in the training records. Only a small percentage of the general employees have received the required general employee training. The program was established in February, 1981. General employee training implementation is not currently adequate. This item will remain open and will be reviewed at a future inspection. (416/81-15-01)

Within the areas reviewed no violation were noted.

6. Staff Qualifications

Reference:
a) FSAR Chapter 13
b) ANSI 3.1/1978 - ANSI 18,1/1971
c) Regulatory Guide 1.8

A review of chapter 13 of the facility FSAR was conducted to evaluate the training requirements and qualifications of the plant staff. All organizational charts and tables in chapter 13 are two years out of date and thus are unusable. Chapter 13 will require updating to correct numerous errors. This item will remain open and will be reviewed at a future inspection. (416/81-15-02)

Within the areas inspected no violation were identified.

7. Operating Staff Training

Reference:
a) Technical Specification 6,4
b) ANSI 18.1/1971 - ANSI 3.1/1978
c) 10 CFR 55
d) FSAR
e) Task Action Item II.B.4. and Denton letter of March 28, 1980
f) Regulatory guide 1.8
g) NUREG 737

a. Review conducted

A review of training records and procedures was conducted to confirm regulatory requirements were met in accordance with the above references. Two areas reviewed have not been established to date. Training for the mitigation of core damage will be established when contractual assignments are made. The licensee estimated that core damage training would commence in October 1981. Addtionally, no Health Physics Training has been conducted. Seven operators that were interviewed were weak in health physics knowledge.

Health physics training is currently being planned and will be implemented in the next few months. This item will remain open and will be reviewed at a future inspection (416/81-15-03).

Senior reactor operator, candidates receive the same basic training as reactor operator canidates with the addition of a supervisory skills course. Some reactor (and senior reactor) operator candidates were weak in the thermodynamics and heat transfer area. Several operator candidates had the reactor fundamentals course waived due to previous experience. This course specifically covers thermodynamics and heat transfer areas. The plant staff committed to ensuring that candidates receive sufficient training in thermal dynamics and heat transfer areas prior to operator licensing examinations.

Within the areas reviewed no items of violation were identified.

7. Final Safety Analysis Review Transient Analysis

The inspector attended a training lecture to ensure training objectives are being met. Some confusion and uncertainty prevailed during the lecture, "Decreasing Coolant Inventory Accident Analysis". Much debate occurred between the lecturer and students. A review of the material with several instructors and plant staff revealed that the transient analysis section of the FSAR is generic in nature and not necessarily plant specific. Several probable errors were noted in Table 6.3.1, Sequence of Emergency Core Cooling System Start Times during the lecture. No formal method of feedback had been established to correct FSAR errors noted during a lecture. Other chapter 6 transient curves were not fully explained in class and several unanswered questions remained at the conclusion of the lecture. Another FSAR discrepancy discovered during interviews was an apparent unconservative analysis on a lost of feedwater heating. The analysis uses a 100° drop of a feedwater temperature as the conservative approach whereas some plant staff pointed out it probably should be in the 110-120° range due to heat balance curves in the FSAR.

This item will remain as an unresolved item (416-81-15-01). The licenses committed to getting a General Electric response to the apparent discrepancies in the transient analysis section of the Final Safety Analysis Report.