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

December 2, 1982

Report Nos. 50-321/82-40 and 50-366/82-38

Licensee: Georgia Power Company
P. O. Box 4545
Atlanta, GA 30302

Facility Name: E. I. Hatch

Docket Nos. 50-321 and 50-366

License Nos. DPR-57 and NPF-5

Inspection at E. I. Hatch site near Baxley, Georgia

Inspector: for J. R. Wray — 11/30/82 Date Signed

Approved by: K. P. Barr, Section Chief
Technical Inspection Branch
Division of Engineering and Technical Programs — 12/1/82 Date Signed

SUMMARY

Inspection on November 15-19, 1982

Areas Inspected

This routine, unannounced inspection involved 32 inspector-hours on site in the areas of a potential overexposure, personnel qualifications, posting, labeling and control of licensed material, and licensee actions on previous inspector followup items.

Results

Of the four areas inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*C. T. Jones, Assistant Plant Manager
*T. V. Greene, Assistant Plant Manager
*W. H. Rogers, Health Physics Superintendent
S. C. Ewald, Power Generation Engineer (Corporate)
*S. B. Tipps, Superintendent of Regulatory Compliance
*C. R. Miles, Jr., QA Field Supervisor
*P. E. Fornel, Jr., Assistant QA Site Supervisor
*D. Smith, Health Physics Lab Supervisor
*M. Link, Health Physics Lab Supervisor
*D. K. Philpotts, Health Physicist
B. C. Arnold, Health Physics Lab Foreman
A. Cancer, Chemistry Lab Foreman
M. T. Squires, Health Physics Lab Foreman
*W. B. Thigpen, Senior QA Field Representative

NRC Resident Inspectors

*P. Holmes-Ray, Resident Inspector
*J. Rogge, Project Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on November 19, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation (321/366/81-32-01) Non ANSI Qualified Personnel. The inspector reviewed licensee responses dated February 4, 1982, and April 21, 1982, and verified through record review and discussion with cognizant licensee representatives that two of the three individuals referenced in the violation have accrued the required work experience. The inspector verified that when the third individual is working as a Health Physics Foreman, a qualified foreman, supervisor, or the Health Physics Superintendent is assigned to work during that shift to provide backup supervision. A training program has been designed to enhance his supervision and qualifications. The inspector had no further questions.

(Closed) Unresolved (321/366/82-11-02) QA Deviation on Class D Air Analysis. The inspector verified that as a result of this licensee identified procedural violation, an adequate program has been established to ensure breathing air systems are tested to Class D air quality standards at the proper frequencies. The inspector reviewed air analyses performed during 1982 for site breathing air systems and determined that the tests were performed at the required frequency and that the air was of Class D or better.

(Closed) Violation (321/366/82-11-05) Failure to Take Action on Radiation Occurrence Memorandum. The inspector reviewed the licensee's response to this violation contained in their letter of June 9, 1982, and verified Management Memorandum No. 178 was issued to Department Heads and Contractor Site Superintendents defining corrective actions to take if personnel are found tampering with dosimetry devices. The responsible individual is no longer onsite. The inspector determined that the disciplinary actions taken were appropriate and had no further questions.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Possible Overexposure Event

On November 9, 1982, the licensee was informed by their contract dosimetry service that processing of a routine monthly thermoluminescent dosimetry (TLD) for the month of October indicated 35.215 rem on both chips. The TLD badge was assigned to a health physics technician from October 12 to October 28. The individual was restricted from entering radiation areas pending completion of a thorough investigation. An Abnormal Radiation Exposure form and a Report of Radiation Occurrence were initiated. The NRC was informed that same day.

During this inspection, the circumstances of the high badge reading were examined. Licensee representatives stated that the individual had lost his regular monthly TLD on October 12, and was assigned badge no. 2185 for the remainder of the month. An evaluation of the worker's exposure for the time period October 1 to October 12, based on RWP and daily pocket dosimeter readings survey and stay time calculations, and exposure of persons working similar jobs in the same locations concluded that the worker's dose was 30 mrem. The inspector reviewed documentation of this evaluation, performed his own evaluation and concluded that the licensee's results appeared to be adequate. A similar evaluation was conducted for the time period October 12 to October 28, which appeared to confirm the pocket dosimeter reading of approximately 220 mrem. The inspector reviewed surveys and RWPs, dosimetry records, exposures of workers performing similar tasks, and discussed with a cognizant licensee representative the dosimetry program. The inspector was informed that two separate containers are kept next to each other in the dosimetry office; one contains new TLDs with zero dose and the other con-

tains lost TLDs which have been recovered. When a TLD is found, all identifying labels are removed and placed in the appropriate container. The individual who lost the TLD is issued a new TLD from the new TLD container (which also has no identifying labels). At the request of the inspector, the licensee processed all the lost TLDS in his possession. Of the thirty-six badges processed, seven indicated zero whole body dose. Readings of 9.5 rem, 22.7 rem, 464 rem were obtained as well as one badge that saturated the reader indicating a dose in excess of 999 rem. Due to the proximity of the two containers and the fact that doses on the order of 35 rem have been seen on lost badges, it appears that TLD badge no. 2185 already had an exposure of 35 rem prior to being issued. The inspector was informed that many TLD badges are found in the drywell and possibly have been in the drywell while at power.

Based on interviews with the worker and accompanying personnel, comparisions with pocket dosimeter readings, description of work activities, stay time and dose rate survey calculations, exposures of persons who had worked with the individual, and the likelihood that the worker's TLD was exposed at 35 rem while lost prior to reissue as his personnel dosimeter, the inspector concluded that 250 mrem appeared to be more representative of the worker's whole body dose for the month of October. The inspector verified that the two TLD containers were separated to prevent recurrence. A licensee representative stated that a metal container with a locking device will be used in the future for collection and storage of lost TLD to ensure against reissue. The inspector had no further questions.

6. Personnel Qualifications

Unit 1 Technical Specifications 6.3.15 states in part that, "Technicians in responsible positions shall have a minimum of two years of working experience in their specialty". Unit 2 Technical Specifications 6.3.1 states in part that, "Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions". Paragraph 4.5.2 of ANSI 18.1-1971 states in part that, "Technicians in responsible positions shall have a minimum of two years of working experience in their speciality".

The inspector reviewed experience records of licensee chem-rad technicians and contract health physics technicians and discussed their qualifications with a licensee representative. The review indicated that only technicians who meet the minimum requirements of ANSI N18.1 are used in responsible positions. No violations or deviations of NRC requirements were identified.

7. Posting, Labeling and Control

The inspector reviewed the licensee's posting and control of radiation areas, high radiation areas, airborne radioactivity area, contamination areas, radioactive material areas and the labeling of radioactive material during tours of the plant.

On November 16, during a tour of the Unit 2 Radwaste Building, the door to the drum capping area was found to be unlocked on two separate occasions. This area has been used for remote filling, handling and storage of high level resin drums. Since the advent of the High Integrity Container (HIC), this area is no longer used for filling 55 gallon drums. The area remains in use as a storage location for old drums, some reading as high as 10 R/hr contact. No readings were identified by the inspector greater than 900 mr/hr at eighteen inches from the radiation source. Technical Specification 6.12 states that high radiation area with general area dose rates greater than 1000 mr/hr must be locked.

Licensee representatives stated that this area has always been locked and was meant to be locked. The inspector emphasized at the exit interviews that although no general area dose rates greater than 900 mr/hrm were identified, doors to areas such as the Unit 2 drum capping area should be more tightly controlled due to the large number of outage workers on site at this time. Licensee management acknowledged the inspectors comments.

Other posting and labeling practices appeared to be adequate. Posting of Notices pursuant to 10 CFR 19.11 appeared to be adequate. No violations or deviations in this area were identified.

8. Licensee Action on Previous Inspector Followup Items

(Closed) (321/366/81-32-02) SCBA Cylinder Procedure Change HNP-8010 and Improper Labeling. The inspector reviewed procedure HNP-8010 and verified appropriate changes have been made to require proper SCBA cylinder labeling. The inspector accompanied by a licensee representative selectively examine breathing air cylinders at various emergency locations throughout the plant and verified their proper labeling. No violation or deviations were identified.

(Closed) (321/366/82-11-01) Possible Additional Multiple Badging-U1 Outage. The inspector reviewed extremity dosimetry issue logs, radiation work permits and discussed with cognizant licensee representative existing practices with regard to multi-badging personnel. The inspector verified that extremity badges are being used frequently on hot jobs, such as work on the Control Rod Drives, and had no further questions.

(Closed) (321/366/82-11-03) High Loss Rate of TLD Badges. The inspector discussed the problem of lost TLD badges with licensees representatives and was informed that when this item was identified, an average of approximately 120 badges were lost each month with about 2200 workers onsite. Modifications were made to the dosimetry devices, training, and the disciplinary actions taken following loss of badges and a sharp decline in lost TLDs resulted (to approximately 15-30 each month during non outage conditions and presently 60 each month with about 2800 outage workers onsite.) The inspector concluded that based on the number of workers presently onsite and the nature of their work, the corrective actions taken to reduce the number of lost TLDs appeared to be adequate. No violations or deviations were identified.

(Closed) (321/366/82-11-04) Failure of Terminating Personnel in Following Check-out Procedure. The inspector was informed that the dosimetry section of the Health Physics department works closely with the Security department in identifying individuals terminating employment and thereby expediously performing the required dosimetry processing. In addition, the licensee is circulating on a monthly bases a list of currently badged employees to department heads requesting identification of those employees no longer onsite. The inspector had no further questions.

9. Licensee Action on NUREG-0737 Items

(Open) (II.B.2) Vital Area Acce s Shielding. This item will be examined during future inspections.

(Open) (II.B.3.3) Post Accident Sampling. The inspector reviewed the licensee's response contained in their letter of September 17, 1982, stating that implementation of Item II.B.3 is scheduled in early Spring 1983 for Unit 1 and late Spring 1983 for Unit 2. This item will be examined during future inspections.

(Closed) (II.B.4) Training for Mitigating Core Damage. This item was reviewed by the resident inspectors in IE report 321/366/81-21. During this inspection training for health physics and chemistry staff was examined. The inspector had no further questions.

(Open) (II.F.1) Additional Accident-Monitoring Instrumentation. The interim requirements of this item were examined by the resident inspectors in IE report 321/366/81-21. During this inspection the inspector verified that the Noble Gas, Iodine, and Particulate high range instrumentation was onsite but needs to be functionally tested. The inspector stated that operational and calibration procedures need to be written and approved as soon as possible. Licensee management acknowledged the inspector's comment. This item will be examined during future inspections.

(Closed) (III.D.3) Improved Inplant Iodine Instrumentation Under Accident Conditions. This item was reviewed by the resident inspectors in IE report 321/366/81-18. During this inspection the inspector reviewed emergency procedure HNP-4826, "Airborne Radioactivity Concentration Determination for Abnormal or Accident Conditions" initially written December 13, 1979. and determined that the methodology of collection, transportation, and analyses of post accident inplant air samples is adequate. Training records were examined to verify that the required indoctrination was given to health physics technicians. The inspector observed the SAM 2/RD-22 instrumentation using silver zeolite cartridges and had no further questions. The items was reviewed by the resident inspectors in I.E. report number 321/366/81-18.