

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

FEB 1 2 1986

Report Nos .:

50-321/86-01 and 50-366/86-01

Licensee: Georgia Power Company

P. O. Box 4545 Atlanta, GA 30302

Docket Nos.: 50-321 and 50-366

License Nos.: DPR-57 and NPF-5

Facility Name: Hatch 1 and 2

Inspection Conducted: January 6-10, 1986

Inspector:

Approved by:

. M. Hosey, Section Chief

Division of Radiation Safety and Safeguards

27, 1986 te Signed

Date

## SUMMARY

Scope: This routine, unannounced inspection entailed 48 inspector-hours on site in the areas of training and qualifications of the contract health physics staff, instrument calibration, performance and documentation of radiation surveys, radioactive waste transportation, radioactive waste classification and respiratory protection.

Results: Of the six areas inspected, no violations or deviations were identified in four areas: two violations were found in the areas of instrument calibration and radioactive waste transportation.

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#### REPORT DETAILS

## 1. Persons Contacted

Licensee Employees

\*H. Nix, General Manager

\*T. Greene, Deputy General Manager

\*D. Vaughn, Senior QAFR

\*D. Elder, Senior QAFR

\*D. Smith, Health Physics Supervisor

\*M. Link, Health Physics Lab Supervisor

\*W. Rogers, Health Physics Superintendent

\*C. Jones, Manager, Engineering D. McCusker, Q. C. Supervisor

R. Zavadoski, Manager, Health Physics and Chemistry

R. Anderson, Health Physics Foreman

C. Coop, Health Physics Foreman

Other licensee employees contacted included four technicians, two security force members, and five office personnel.

Other Organizations

J. Lancor, Health and Environmental Programs - Atlanta

S. Bland, Licensee Consultant - 10CFR 61

NRC Resident Inspectors

\*P. Holmes-Ray

G. Nejfelt

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on January 10, 1986, with those persons indicated in paragraph 1 above. The licensee was informed of two apparent violations involving the calibration of Eberline Model 6112B Teletectors (paragraph 5) and a shipment of solidified waste oil arriving at the burial site with one punctured drum in the shipment (paragraph 6).

The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation (85-15-01): This violation concerned the inadequate calibration of two PCM-1 personnel monitors. The inspector reviewed and verified the corrective actions as stated in Georgia Power's letter of July 8, 1985.

4. Training and Qualifications (83723)

The licensee was required by Technical Specification (TS) 6.3 to qualify radiation protection technicians in accordance with ANSI 18.1

The inspector discussed the qualifications of contract radiation protection technicians with a licensee representative. The inspector also discussed with licensee representatives the method used to assign experience credit to contract technicians. The inspector reviewed the resumes and tests for selected contract radiation protection technicians.

No violations or deviations were identified.

5. Control of Radioactive Materials and Contamination, Surveys, and Monitoring (83726)

The licensee was required by 10 CFR 20.201(b), 20.403, and 20.401 to perform surveys to show compliance with regulatory limits and to maintain records of such surveys. Chapter 12 of the FSAR further outlined survey methods and instrumentation. Technical Specification 6.8 required the licensee to follow written procedures. Radiological control procedures further outlined survey methods and frequencies.

## a. Surveys

The inspector observed, during plant tours, surveys being performed by the radiation protection staff. The inspector reviewed selected survey records for the months of October, November and December 1985.

On December 13, 1985, while flooding the refueling cavity in preparation for reactor defueling, the refuel pool water overflowed into the refuel pool ventilation system. The water drained out of the ventilation system onto the floor of the 203 foot elevation of the reactor building.

The health physics personnel on shift isolated and surveyed the area. No contamination in excess of licensee action levels was identified.

#### b. Instrumentation

During plant tours, the inspector observed the use of survey instruments by plant staff. The inspector examined the fourth quarter 1985 calibration records for Eberline Model 6112B Teletectors and Eberline Model RO-2A survey instruments. The inspector noted the

serial numbers for those instruments listed as being out of service and verified this by referencing the calibration log books located in the calibration facility. The inspector identified one teletector and one RO-2A which had not been calibrated on the high range scale. The calibration records had been reviewed and approved by the cognizant health physics foreman.

Technical Specification (TS) 6.8.1 required that written procedures be established, implemented and maintained covering the applicable procedures of Appendix A of Regulatory Guide 1.33, February 1978.

Regulatory Guide 1.33, February 1978 required procedures for radiation surveys.

Plant procedure 62RP-RAO-008-OS, Radiation and Contamination Surveys required current instrument calibration prior to the start of a survey.

Plant procedure 62HI-OCB-005-0, Teletector Model 6113B/O Operation and Calibration, required the instrument to be calibrated and the calibration documented prior to use.

Contrary to the above:

- a. Teletector Model 6112B, Serial number 4491 did not have a high range calibration documented when that instrument was used to perform radiation surveys during radiography operations conducted near the Unit 1 drywell access hatch on January 8, 1986.
- b. Teletector Model 6112B, Serial number 10398 was used to perform burial box surveys at the Waste Sorting and Temporary Storage Facility when it had been tagged as out of service for repair on October 30, 1985, and had not been recalibrated prior to its use during the week of January 6, 1986.

The failure to calibrate the Teletectors as required by procedures 62RP-RAO-008-OS and 62HI-OCB-005-OS was identified as an apparent violation of TS 6.8.1 (50-321, 366/86-O1-O1).

A licensee representative stated that instrument accountability had been a problem during the previous Unit 2 outage. As a result, the licensee developed a card system to track instrumentation as it was checked out of the health physics equipment room. As an instrument was checked out, the instrument type and serial number would be noted on the card along with the technician's name or work location. No licensee personnel had been assigned the task of instrument issue and accountability so survey instrumentation was checked out and returned on an honor system. The licensee was developing a new logbook for instrument checkout and was in the process of providing around the clock equipment room personnel to issue and receive survey instruments. The function of those personnel was to ensure calibrated

instruments were used in surveys and to ensure that paperwork associated with instrument checkout was correctly completed.

# 6. Transportation (86721)

The licensee was required by 10 CFR 71.5 to prepare shipments of radioactive material in accordance with DOT regulations. The inspector observed the preparation of a shipment of dewatered resin and discussed the shipment with the shipping supervisor, clerk, and radiation protection technician. The inspector reviewed the procedure under which the shipment was made and the resulting documentation. The inspector reviewed recent changes to shipping procedures and selected records of shipments of Class B radioactive waste made in 1985.

On August 23, 1985, the licensee made shipment number 85-094 from the licensee's site to the U.S. Ecology burial site near Richland, Washington. The shipment consisted of 79 DOT 7A Type A containers of solidified oil being shipped as an LSA shipment. The oil had been solidified in 55 gallon drums using the licensee's process control program. The shipment was received at the U.S. Ecology site on August 26, 1985. During unloading, the burial site inspectors identified a hole near the upper rolling hoop on drum number 85-876 which contained approximately 200 nCi of activity. Surveys performed on the drum and in the vehicle did not identify any leakage of radioactive material. Upon notification by the burial site, the licensee dispatched a representative to the burial site to perform an inspection of the shipment.

The inspector discussed this incident with licensee representatives. A licensee representative stated that the drum lifter used to place the drums in the transport vehicle had possibly punctured the drum during the loading operations.

10 CFR CFR 71.5(a) requires a licensee, who transports licensed material outside the confines of his plant or other place of use or delivers any licensed material for transport, to comply with the applicable requirements of the Department of Transportation (DOT) regulations presented in 49 CFR Parts 170 through 189. 49 CFR 173.425 requires that Low Specific Activity (LSA) radioactive materials consigned for exclusive use be packaged in a DOT Specification 7A Type A package or in a strong, tight package so that there will be no leakage of radioactive material under conditions normally incident to transportation.

Contrary to the above, the licensee failed to package a shipment of LSA radioactive material in a DOT Specification 7A Type A package or a strong, tight package in that on August 26, 1985. Shipment No. 85-094 arrived at the burial facility and a hole was found in one drum. This was identified as an apparent violation of 10 CFR 71.5(a) (50-321, 366/86-01-02).

# 7. Solid Waste (84722)

10 CFR 20.311 requires a licensee who transfers radioactive waste to a land disposal facility to prepare all waste so that the waste is classified in accordance with 10 CFR 61.55 and meets the waste characteristic requirements of 10 CFR 61.56. It further establishes specific requirements for conducting a quality control program and for maintaining a namifest tracking system for all shipments.

The inspector reviewed the methods used by the licensee to assure that waste was properly classified, met the waste forms and characteristics required by 10 CFR 61 and met the disposal site license conditions and discussed the use of these methods with licensee representatives, and the licensee's consultant on 10 CFR 61 waste classification.

During the inspector's review of the licensee's waste classification procedures, the inspector noted that the sampling frequency for B and C class wastes was not included. The inspector discussed the sampling frequencies outlined in the Low-Level Waste Licensing Branch Technical Position on Radioactive Waste Classification with a licensee representative. The licensee representative stated that the procedure would be revised to include the recommended sampling frequencies. The procedural revision will be reviewed during a future inspection (50-321, 366/86-01-03).

#### 8. Audits

The inspector discussed the audit and surveillance program related to radiation protection, radioactive waste management and transportation of radioactive material with licensee representatives. The inspector reviewed the following audits and surveillances:

- Quality Assurance Audit of the Radwaste Controls Program, Audit No. 85-RWC-3, completed on December 3, 1985. This audit incorporated elements of the Solid Radioactive Waste Program and associated training.
- Quality Assurance Audit of the Health Physics Program, Audit No. 85-HP-3 completed on November 6, 1985. This audit reviewed elements of the dosimetry, QA/QC, records and instrument calibration programs.
- Quality Assurance Audit of the Mealth Physics Program, Audit No. 85-HPN-2, completed on June 27, 1985. This audit reviewed routine and special health physics practices used when assuring plant maintenance and health physics interfaces with other departments.

## 9. Review of Employee Concern

The inspector reviewed an employee concern raised by a contract I&C technician concerning his whole body exposure for the fourth quarter 1985. The technician had previously worked at a Region I facility as a contract

technician. The estimated exposure for the employee for the period of October 1985 was 371 millirem whole body.

The Region I facility performed their monthly TLD read and responded to the licensee's request for the record whole body exposure within the allowed thirty day period. The Region I facility's Occupational Radiation Exposure Report indicated that the contract technician's accumulated whole body exposure for the quarter was 1,710 millirem and 1,850 millirem for the year.

No violations or deviations were identified.

# 10. Facility Statistics

As of November 30, 1985, the collective dose for the period January 1, 1985 to November 30, 1985 was 568 man-rem as measured by TLD.

As of December 31, 1985, the licensee had mad 158 shipments of radioactive waste consisting of 73,883.7 cubic feet of waste containing 38,310.7 Curies of activity. The current inventory of radioactive waste onsite was 1,694.5 cubic feet containing approximately 12 curies of activity.

Personnel contaminations for 1985 numbered 1,890. This figure does not include clothing contamination due to noble gas air activity.

Plant contaminated areas totaled 14,111 square feet which was 50 percent of the 1984 level.