



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

October 21, 1982

Report Nos. 50-321/82-30, 50-366/82-28

Licensee: Georgia Power Company
270 Peachtree Street
Atlanta, GA 30303

Facility Name: E.I. Hatch 1 and 2

Docket Nos. 50-321/50-366

License Nos. DPR-57 and NPF-5

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

Inspector:

J. R. Wray
J. R. Wray

10/20/82
Date Signed

Approved by:

K. P. Barr
K. P. Barr, Section Chief
Technical Inspection Branch
Division of Engineering and Technical Programs

10/20/82
Date Signed

SUMMARY

Inspection on 10/19-10/22, 1982

Areas Inspected

This routine, unannounced inspection involved 26 inspector-hours on site in the areas of radioactive liquid releases, radiological effluent reports, radioactive gaseous releases, radwaste shipments, effluent filter system tests, reactor coolant chemistry, licensee audits, and training.

Results

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

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *H. Nix, Plant Manager
- *C. Jones, Assistant Plant Manager
- *W. Rogers, Health Physics Superintendent
- *D. Smith, H. P. Lab Supervisor
- *R. Hand, Chemistry Lab Supervisor
- *C. Belflower, Q. A. Site Supervisor
- *P. Fornel, Jr., Assistant QA Site Supervisor
- *D. Vaughn, Senior QA Inspector
- *S. Tipps, Superintendent of Regulatory Compliance
- *F. Willis, Lab Foreman

NRC Resident Inspector

R. Rogers, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on October 22, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Radioactive Liquid Releases

The inspector examined selected liquid release permits for the period of January 1, 1982, to October 12, 1982. Based on these examinations and subsequent discussions with licensee representatives, the inspector determined that the licensee appeared to be in compliance with environmental Technical Specification requirements relating to: (1) instantaneous release limits; (2) cumulative release limits; (3) establishment of alarm setpoints for the effluent control monitor; (4) maximum activity in radwaste tanks; and (5) sampling and analysis of liquid radwastes. No items of noncompliance or deviations were identified.

6. Radioactive Gaseous Releases

The inspector examined selected gaseous release permits for the period. Based on the records reviewed and discussions with licensee representatives, the licensee was found to be in compliance with environmental Technical Specification requirements related to: (1) noble gas instantaneous, quarterly and annual release waste monitor alarm settings; (4) maximum activity in decay tanks; (5) sampling and analysis of radioactive material in gaseous wastes. No items of noncompliance or deviations were identified.

7. Radiological Effluent Report

Environmental Technical Specification 5.7.1.b requires that a report on the radioactive discharge released from the site during the previous six months of operation shall be submitted to the NRC. An inspector reviewed the "Semi-annual Radioactive Effluent Release Report" for the facility for the period of January 1982 through June 1982, and discussed the report with a licensee representative. The inspector had no further questions concerning the report.

8. Radwaste Shipments

The inspector reviewed records of shipments of radioactive solid wastes from the plant between January 1, 1982, and the time of the inspection. The inspector determined from the shipping papers and discussion with licensee representatives that the shipments met the requirements of NRC, DOT, and state regulations. The inspector compared the quantities of radioactive solid wastes listed on the shipping records for the period of January 1, 1982 through June 30, 1982, with the data reported in the Semiannual Radioactive Effluent Released Report for the same period and had no questions.

On September 29, 1982, the inspector observed the loading of 21 drums of compacted trash for shipment to the Barnwell, South Carolina burial site. The highest contact reading on a drum was 1.0 R/hr. A total of 1.55 curies of radioactivity was packaged in approximately 158 cubic feet. Principal isotopes were Zn-65, Cs-137, Cs-134, and Co-60. The drums were shipped in a Chem-Nuclear, 21-300 shipping cask for shielding purposes only. Because the shipment was not greater than type A quantity and, therefore, did not require a certified cask, a licensee representative stated that the certificate of compliance requirements did not have to be met. The inspector performed an independent confirmatory survey of the loaded trash and examined the shipping papers. No violations or deviations were identified.

The inspector questioned a cognizant licensee representative on the method used to determine activity in packages for shipment. Diluted samples of resin are taken for resin shipments. For laundry and compacted trash

shipments, contact dose rate readings are obtained and activity determined using the 6CEn formula. The inspector was told that the highest contact reading is used for drum shipments while the average reading is used for LSA box shipments. The inspector determined that no density correction has been used for the different compaction ratio of the compacted waste. The inspector informed licensee management that density corrections should be included in activity estimations of radwaste shipments. This item will be examined during future inspections (82-30-01)

The inspector noted that resin shipments from Unit 1 indicated trace amounts of Sr-90 (a transport Group II isotope). A licensee representative stated that an offsite contractor has analyzed reactor coolant samples from Unit 1 and Unit 2 and determined the presence of Sr-90 in a $3.4E-04:1$ ratio to Cs-137 in Unit 1. Unit 2 showed no indication of Sr-90. The licensee uses this ratio to estimate the amount of Sr-90 in each shipment from Unit 1. The inspector was informed that a study is planned to determine the amount of transuramics in samples of reactor coolant samples so that Transport Group I isotopes could be estimated. The inspector had no further questions.

9. Effluent Filter Systems

Unit 1 Technical Specification section 4.7.B lists the testing and surveillance requirements for the Unit 1 Standby Gas Treatment System Filter trains. The inspector selectively examined records of charcoal and HEPA filter test, and operability tests and determined that the result of the tests and frequencies of analyses satisfied the technical specification requirements. No violations or deviations were identified.

Unit 2 Technical Specification section 4.6.6.1 lists the testing and surveillance requirements for the Unit 2 Standby Gas Treatment System filter trains. The inspector noted that a licensee audit found that results of charcoal filter lab tests performed in June 1981, and October 1981, did not meet the required 99 percent efficiency required by Regulatory Guide 1.52 for a four inch charcoal bed as referenced in Technical Specification 4.6.6.1.1.c. The inspector verified that the applicable procedure has been modified and the appropriate testing requirement are used. A licensee representative stated that the misinterpretation was because the Unit 1 SGTS trains are 2 inch charcoal beds and require only 90 percent efficiency test results. The inspector stated that, because this item was licensee identified, is a Severity Level 4 or 5 violation, and was corrected appropriately, no notice of violation will be issued in accordance with the NRC enforcement policy. The inspector reviewed the remaining records of charcoal and HEPA filter tests and operability tests and determined that the results satisfied the technical specification requirements.

10. Reactor Coolant Chemistry

Unit 1 Technical Specification 4.6.F specifies the limiting conditions for operation and the surveillance requirements for the Unit 1 reactor coolant system (RCS) chemistry. The inspector selectively reviewed records of dose equivalent iodine (DQI), gross activity, conductivity, and chlorides for the period January 1, 1982, to the present. Analyses for Unit 1 appeared to have been sampled at the required frequencies. No violations or deviations were identified during the inspection.

Unit 2 Technical Specifications 3.4.4 and 3.4.5 specify the limiting conditions for operation and the surveillance requirements for the Unit 2 RCS chemistry. Tables 3.4.4-1 and 4.4.5-1 specify the limits on RCS chlorides and conductivity and the analysis frequencies for dose equivalent iodine and gross activity respectively. The inspector selectively examined records from January 1, 1982, and verified that routine analyses of RCS samples are performed within technical specification time limits. However, chemistry log forms did not record special analyses conducted following power changes of 15 percent or greater (scrams). The inspector verified by reviewing past Geli analysis sheets that these required analyses were performed. A licensee representative acknowledged that the results of the analysis did not appear to be recorded appropriately. The inspector reviewed the appropriate chemistry procedure which had been updated in accordance with technical specifications requirements. The inspector stated that it appeared the procedure did not require analyses for dose equivalent iodine following power changes of 15 percent or greater and did not even have space for the recording of power level on the sheet. The resident inspector stated that the procedure did not even appear to require the sample analysis within the specified time. A licensee representative agreed to modify the chemistry procedure. This item will be examined during future inspections (82-30-02).

11. Licensee Audits

The inspector discussed the audit and surveillance program related to radiation protection, radioactive waste management and transportation with licensee representatives. An inspector reviewed the following Quality Assurance Operations Audits:

QA-82-231, Environmental Technical Specifications 7/28/82
QA-82-145, Radwaste Control 5.18.82
QA-82-112, Health Physics Program 4/5/82
QA-82-74, Site Chemistry and Radiochemistry Programs, 3/18/82
QA-81-322, Radwaste Controls, 11/18/81
QA-81-286, Health Physics, 10/9/81
QA-81-106, Site Chemistry and Radiochemistry Programs, 5/5/81

An inspector reviewed selected Quality Control surveillance in the areas of health physics activities, radioactive waste processing and shipments of radioactive waste to offsite burial facilities which were performed in 1982. These audits appeared quite constructive in that they were performed by an former health physics technician who expanded the QC audit modules to include respiratory protection and instrumentation and calibration. The QC audit program appears to be starting a trending program of different facets of the HP department (i.e. contamination cases, equipment maintenance records, etc.). The inspector also reviewed a corporate audit conducted November 2, 1981, by an individual intimately knowledgeable in the Health Physics area. The inspector discussed with licensee representatives additional corporate initiated health physics audits performed since November 1981. The inspector evaluated the frequency, scope and followup action and had no further question. No violations or deviations were identified.

12. Training

The inspector reviewed the content of the general employee training program by participating in the site badging process. The presentations appeared to be appropriate for compliance with 10CFR19 requirements. The inspector noted that Regulatory Guide 8.13 "Instructions Concerning Prenatal Radiation Exposure" was reviewed. It was suggested to licensee management that additional emphasis be included on reduction of solid radwaste because of the extended outage scheduled to begin October, 1982. In addition, the inspector recommended that the section on risks from radiation exposure be expanded to include Regulatory Guide 8.29 "Instruction Concerning Risks from Occupation Radiation Exposure." The inspector stated that the examination appeared appropriate to ensure that each individual possesses an adequate understanding of radiation protection.