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

Report Nos. 50-321/82-36 and 50-366/82-34

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 Baxley, Georgia; Atlanta, Georgia; and Decatur, Georgia

Inspector: A. L. Cunningham — 12/17/82
A. L. Cunningham — Date Signed

Approved by: D. M. Montgomery — 12/20/82
D. M. Montgomery, Section Chief — Date Signed
Independent Measurements and Environmental
Protection Section
Division of Engineering and Operational Programs

SUMMARY

Inspection on November 30 - December 6, 1982

Areas Inspected

This routine, unannounced inspection involved 40 inspector-hours on site in the areas of radiological environmental monitoring including: management and administrative controls; review of Annual Environmental Monitoring Report for the period ending December 31, 1981; status of environmental monitoring defined in ETS-3.2; review of previous inspection findings; review of laboratory inter-comparison and cross-check programs; collection of ground water samples (LER 50-321/1979-21 followup); verification of colocated TLDs deployed as per NRC Direct Radiation Network Program.

Results

Of the seven areas inspected one violation was found in one area (failure to conduct annual audit of radioanalytical program paragraph 5.d.2); one apparent deviation was found in one area (failure to implement corrective action commitment, paragraph 5.d.2).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*T. Greene, Assistant Plant Manager
*C. R. Miles, Jr., QA Field Supervisor
*C. E. Belflower, QA Site Supervisor
*P. E. Fornel, Assistant QA Site Supervisor
*W. H. Rogers, Health Physics Superintendent
*R. Harrell, Laboratory Foreman
**D. R. Savage, Supervisor, Nuclear Procurement Standards
**R. Walker, Senior QA Field Representative
*R. Tracy, Associate Engineer
*T. Elton, Plant Engineering Supervisor
B. Maulsby, Supervisor, GPC Environmental Center

NRC Resident Inspector

*P. Holmes, Ray

*Attended exit interview at plant site on December 3, 1982
**Attended exit interview at GPC General Office on December 6, 1982

2. Exit Interview

At the conclusion of the plant site inspection, the inspection scope and those findings identified through December 3, 1982, were summarized and discussed with the persons indicated in paragraph 1, above. On December 6, 1982, the inspector summarized the inspection scope, and discussed the status of the licensee's corrective actions regarding the violation cited during the previous inspection (IE Report Nos. 50-321/81-24 and 50-366/82-24) with those persons indicated in the above referenced paragraph. As a consequence of this review, the violation and deviation cited herein were identified. These enforcement items were discussed via telephone with licensee management representatives on December 13, 1982, as referenced in the cover letter to this report.

3. Licensee Action on Previous Enforcement Matters

(Open) Violation (50-321/81-24-03, 50-366/81-24-03). Failure to Conduct Annual Audits of the Analytical Program (ETS 3.2, Table 3.2-1) as per ETS-5.3.2.2.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Management Controls

a. General

Management and administrative controls defined in Section 5.0 of the Environmental Technical Specifications (ETS) were reviewed by the inspector with respect to the following items: (1) organizational and management responsibility for implementation of the radiological environmental monitoring program; (2) environmental monitoring program procedures; (3) quality assurance including periodic audits and analytical quality control.

b. Organizational and Management Responsibilities

The inspector conducted a comprehensive review, including discussions with cognizant licensee representatives, of recent corporate organizational changes to determine the adequacy of specific management responsibility for assuring implementation of the radiological environmental monitoring program. Although recent organizational changes have been instituted, management responsibility for implementation of the radiological environmental provisions of ETS-3.2 remains essentially as defined in ETS-5.1 and procedure HNP-7650. These references address program responsibilities of the Plant Manager, Manager of Environmental Affairs, Nuclear Engineer, and the Manager of Quality Assurance in the respective areas of sampling and analysis, program coordination, interpretation and evaluation of program results, and periodic audits of plant operation and environmental monitoring activities to assure conformance with the ETS. There were no questions regarding organizational and management responsibilities for implementing the radiological environmental monitoring program defined in ETS-3.2, Table 3.2-1.

c. Procedures

1. Environmental Technical Specification 5.6 requires preparation of and adherence to detailed written procedures for all activities involved in implementing the radiological environmental monitoring program. The subject specification further requires that such procedures will apply to sampling, data recording and storage, measurements and analyses, and actions to be taken when limits are approached or exceeded. Procedures were reviewed in detail and discussed with cognizant licensee representatives during the previous environmental inspection (50-321/82-24 and 50-366/82-24). Efforts during the current inspection were confined to a review of procedures revised subsequent to the previous inspection cited above. Review of the procedures listed below disclosed that all revisions thereto were consistent with procedural requirements defined in ETS-5.6.

Procedure No.	Revision/Date	Procedure Title
ENV-10-22	R2, 11/29/82	Radiological Data Handling
ENV-13-07	R3, 3/19/82	Internal Audits
ENV-14-01	R1, 1/25/82	Environmental Affairs Center Organization
ENV-14-02	R1, 1/25/82	Selection, Use, and Control of Contractors
HNP-7800	R10, 7/27/82	Airborne Radioactivity
HNP-7802	R10, 7/27/82	External Radiation
HPN-7803	R12, 9/2/82	Milk
HPN-7804	R8, 7/27/82	Grass
HPN-7805	R9, 7/27/82	River Water
HPN-7806	R7, 9/2/82	Ground Water
HPN-7820	R4, 10/6/82	Environmental Air Filter Flow Rate Determination
HPN-7850	R2, 10/14/82	Quality Assurance for ETS

2. Inspection of procedures also included review and audit of sample collection and shipping records (i.e., shipment of environmental samples to contract laboratories for radiochemical analysis) for the period January 1, 1982 through December 3, 1982. Inspection disclosed that all samples were shipped as required by licensee procedures HNP-7802 through HPN-7809, and ENV-10-17 through ENV-10-19. All required environmental sample analyses defined in ETS-3.2, Table 3.2-1, are conducted by licensee contractor laboratories. The contractor laboratories and respective radiochemical analyses conducted thereby are as follows: (1) Eberline Midwest Facility - TLD's; (2) Center for Isotopic Studies, Universit of Georgia - grass, tritiated water (river water, plant site ground water); (3) Teledyne Isotopes - particulate filters, radioiodine, drinking water (gamma isotopic), milk, clams, fish, river sediment. Teledyne and Eberline analytical procedures, including QA/QC, were not reviewed by the inspector during the subject inspection.

3. Procedures HPN-7803 (Milk Sampling) and HPN-7850 (Quality Assurance for ETS) listed above were identified as follow-up items during the previous inspection (Items 50-321/81-24-01, 50-366/81-24-01 and 50-321/81-24-02, 50-366/81-24-02 respectively). These items addressed required revisions discussed in the referenced Inspection Report. As cited above, inspection disclosed that all revisions were consistent with Environmental Technical Specification requirements. There were no further questions regarding these items.

d. Audits

1. Environmental Technical Specification 5.3.2.2 requires that audits of facility activities shall be performed at least once a year under the cognizance of the SRB to ensure conformance of facility operation to all provisions of the ETS. Inspection included the following items: (1) review of audits conducted subsequent to the previous radiological environmental inspection (50-321/81-24, 50-366/81-24); (2) review of the previous enforcement matter (50-321/81-24-03, 50-366/81-24-03) which addressed the licensee's failure to audit the radioanalytical program for analyses defined in ETS 3.2, Table 3.2.1.

2. Inspection disclosed that Audit No. QA-82-231 (Audit Report No. 82-ETS-1) was conducted June 25 - July 7, 1982 by the plant QA staff. The audit addressed radiological environmental sampling and the onsite meteorological measurements program. Inspection included a detailed review of the audit check list, audit findings, and followup of the required resolution of such findings. Review of the quality assurance audit reports, the respective responses thereto, and the corrective actions implemented, disclosed that all audit findings were satisfactorily resolved. There were no questions regarding this item.

3. Review of the previous enforcement item referenced in paragraph 5.d.1, above, and the licensee's response in their letter of December 30, 1981, disclosed that the licensee, notwithstanding certain corrective and preventative action described therein, failed to perform audits of the analytical program defined in ETS-3.2, Table 3.2-1, during 1980, 1981, and 1982, through December 6, 1982. This finding was discussed with licensee representatives on December 6, 1982, and later, via telephone on December 13, 1982, as referenced in the subject report cover letter. During the course of this discussion, licensee representatives were informed of the following NRC findings: (1) failure to perform the required audits of the referenced analyses constituted a continuing violation (50-321/82-36-01, 50-366/82-34-01); (2) failure to implement the commitment cited in Item 4 of the licensee's letter referenced above (viz., the development and implementation of a program to provide for annual QA audits of contractor activities related to the environmental monitoring by

April, 1982) constituted a deviation (50-321/82-36-02, 50-366/82-34-02). Licensee representatives acknowledged the NRC findings and stated that an appropriate response would be submitted to the NRC which defined a program providing for Annual QA audits of contractor activities related to environmental monitoring; and further, that such audits would be implemented by February, 1983. These items will be reviewed during subsequent inspections to determine if further enforcement action is appropriate.

6. Implementation of Radiological Environmental Monitoring Program

a. Environmental Technical Specification 3.2 defines the requirements for the radiological environmental monitoring program. Inspection included review and discussion of the following items with cognizant licensee representatives: (1) Annual Environmental Report (as required by ETS-5.6.1.1) for the period ending December 31, 1981; (2) environmental sampling field data and records for the period January 1, 1982 through December 3, 1982; (3) records/invoices of licensee shipments of environmental samples to contractor laboratories for radiochemical analyses during the period Janaury 1, 1982 through December 3, 1982; (4) records verifying receipt of environmental samples by service contractors, and verification of analytical results generated by the contractors during the above cited period; (5) review of updated radiological environmental monitoring procedures. Inspection disclosed that the above cited parameters were consistent with Technical Specification requirements. There were no questions regarding this item.

b. The inspector accompanied a licensee representative on routine monthly river water sampling at the assigned control and indicator stations. Inspection also included a tour of all air particulate/radioiodine monitoring stations and associated TLDs including those deployed by the State of Georgia and the NRC. Inspection disclosed the following: (1) automatic, intermittent water samplers deployed for collection of monthly river water samples were adequately maintained and operated to assure required sampling consistent with Technical Specification requirements; (2) all air particulate/radioiodine monitors were adequately maintained to assure continuous operation, and were periodically calibrated employing NBS traceable calibration standards as required. There were no questions regarding this item.

7. Status Review of LER-50-321/1979-021

A summary of the subject LER addressing intrusion of tritiated water into plant Hatch ground water sources is given in paragraph 8 of IE Inspection Report Nos. 50-321/80-12 and 50-388/80-12. As part of a continuing followup to evaluate the significance of tritium concentrations in groundwater, thirteen groundwater samples were collected by the inspector for tritium analysis at the RII laboratory. Concurrent sampling was conducted by the licensee. Licensee samples will be submitted to the licensee's contractor

laboratory for comparable analysis. NRC and licensee analytical results will be reviewed during subsequent inspections.

8. NRC TLD Direct Radiation Monitoring Network

Inspection included review and verification of placement of co-located NRC/HNP TLDs deployed under the NRC Direct Radiation Monitoring Network Program. Seven randomly selected NRC TLD station locations were also included. Inspection confirmed that at all TLD stations selected for review were deployed as indicated in the network deployment scheme.

9. Interlabortory Comparsion Program

Inspection included a detailed review of the 1981 data compiled (January 1, 1981 to December 31, 1981) for the environmental surveillance of radioactivity and radiation levels within the Hatch plant facility environs conducted by the Environmental Protection Division of the State of Georgia Department of Natural Resources under NRC Contract No. NRC-05-80-279. All analyses of samples collected by or assigned to the State were performed by the Environmental Protection Division Laboratories. The interlaboratory analytical comparative program with the licensee included split and/or duplicate sample analyses for gross alpha, gross beta, total gamma dose (TLDs), and isotopic analyses (gamma emitters) of air, surface water, milk, fish, and vegetables. Review of the subject report disclosed the following: (1) analytical results in the case of milk were in close agreement; (2) licensee gamma isotopics data for sediment, were generally higher than that determined by the State; (3) variations in vegetation sampling correlations were noted for both duplicates and splits obtained from the same batch. In the latter item, such variation was attributed partially to moisture content (e.g., dryout due to shipping), and possible inadequate blending prior to splitting in case of split samples. In view of these discrepancies, the State has implemented additional sampling and analyses to identify and resolve the problem. Radioactivity concentrations detected in the environment were significantly below action levels assigned by the licensee and the applicable limits specified in 10CFR20. Review of results of the State/EPA Crosscheck Program conducted during the 1981 calendar year indicated close agreement for all parameters involved.