



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

Report Nos. 50-416/81-17 and 50-417/81-09

Licensee: Mississippi Power and Light Company
P. O. Box 1640
Jackson, MS 39205

Facility Name: Grand Gulf Nuclear Station

Docket Nos. 50-416 and 50-417

License Nos. CPPR-118 and CPPR-119

Inspection at Port Gibson, Mississippi

Inspector: D. M. Montgomery for 7-15-81
A. L. Cunningham Date Signed

Approved by: D. M. Montgomery 7-15-81
D. M. Montgomery, Acting Section Chief Date Signed

SUMMARY

Inspection on June 15-22, 1981

Areas Inspected

This routine, unannounced inspection involved 40 inspector-hours onsite in the area of preoperational radiological environmental monitoring including implementation of monitoring programs; review and evaluation of annual preoperational radiological environmental monitoring reports; management controls; monitoring program procedures; and quality control of analytical measurements.

Results

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

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *C. K. McCoy, Plant Manager
- *D. Ortiz, Environmental Monitoring Coordinator
- W. Guider, Environmental Coordinator
- E. L. Stuart, Assistant Plant Manager
- *R. R. Weedon, Superintendent of Chemical and Radiological Control
- R. Davis, Technical Services Engineer
- G. O. Smith, Environmental Specialist
- *C. Bell, QA Engineer
- *J. W. Yelberton, Quality Assurance Supervisor
- *D. Hunt, Plant Quality Supervisor

NRC Resident Inspector

- *A. Wagner

- *Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on June 22, 1981, via conference telephone conversation with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

No previous inspection findings were outstanding.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Implementation of Preoperational Radiological Environmental Monitoring Program

- a. The inspector conducted a detailed status review of the preoperational radiological environmental monitoring program to verify the implementation thereof and to assess its compliance with the program commitments defined in Section 6.1.5 of the Environmental Report (Operating License Stage). Program status review included the following: (1) inspection of monitoring and sampling stations including the availability, maintenance, and calibration of monitoring and sampling equipment used; (2) review of preoperational environmental monitoring reports for the periods ending December 1978, 1979 and 1980 respectively, with emphasis on identification of missing data, obvious mistakes and anomalous measurements, observed trends or biases in the data presented, and implementation of corrective action for anomalous results identified; (3) written procedures for assuring implementation of each program parameter.
- b. Inspection of monitoring and sampling stations listed in Table 6.1.30 of the referenced Environmental Report included the following: (1) all air particulate and associated radioiodine and soil monitoring stations; (2) all surface and groundwater sampling stations; (3) ten randomly selected direct radiation monitoring stations (including TLD's associated within each air particulate monitoring station); (3) milk sampling station at Alcorn University; (4) onsite meteorological measurements. Inspection disclosed that all air particulate monitoring equipment was calibrated every six months and appropriately tagged with calibration stickers. Inspection also disclosed that an adequate supply of air particulate monitoring replacement equipment and spare parts was maintained to minimize periodic interruptions of required continuous monitoring. The location of all monitoring and sampling stations listed above complied with those locations cited in the referenced Environmental Report and draft technical specifications. Review of the onsite meteorological measurements program disclosed that three years of preoperational continuous hourly data were compiled during the periods August 1972 to July 1973, August 1973 to July 1974, and January 1976 through December 1976. The annual data recovery efficiency for each of the three years cited above were 95.15%, 98.11%, and 93.86%, respectively. There were no questions regarding this item.
- c. Inspection included a review of annual preoperational radiological environmental sampling and analysis summaries for the periods ending December 1978, 1979, and 1980. Each report included a listing of missing samples and the respective reasons therefore, and summary of analytical quality control. Inspection disclosed that the subject reports were consistent with preoperational commitments defined in Section 6.1.5 of the Environmental Report in terms of the sampling locations involved, monitoring and surveillance frequencies, and interpretation and evaluation of results.

- d. Inspection further included a detailed review of written procedures developed to assure implementation of the preoperational radiological monitoring program. The licensee's program plans, as defined in the procedures, were designed to satisfy the objectives of Section 6.1.5 of the Environmental Report, and the recommended quality assurance program defined in Regulatory Guide 4.15. The procedures listed below were reviewed.

01-S-08-9 (2/14/80 - R-3) Administrative Procedure - Preoperational Radiological Environmental Monitoring Program.

08-S-05-3 (10/2/80-R-0) Personnel Qualifications for Radiological Environmental Monitoring

08-S-06-1 (1/16/80-R-0) Replicate/Duplicate Sample Collection

08-S-06-2 (1/6/81-R-0) Control and Preparation of Environmental Samples

08-S-06-4 (1/20/81-R-0) Soil Sample Collection

08-S-06-5 (2/20/81-R-0) Preoperational Environmental Sample Collection

08-S-08-10 (9/2/80-R-0) Administrative Procedure - Operational Radiological Environmental Monitoring Program.

Administrative Procedure 08-S-08-10 listed above, described the methods (including detailed management controls) to be used by the licensee to satisfy the conditions, commitments, and requirements defined in proposed GGNS Technical Specifications, and the recommended quality assurance guidance defined in Regulatory Guide 4.15 for operational radiological environmental monitoring. Inspection disclosed that the procedures were adequate for assuring implementation of the pre-operation monitoring objectives defined in Section 6.1.5 of the Environmental Report. There were no questions regarding this item.

6. Analytical Quality Control

The licensee has contracted with Eberline Instrument Corporation to analyze all preoperational environmental samples. In view of the above, the inspector examined Eberline's annual reports for the periods ending December 1978, 1979 and 1980, respectively. These reports summarized the quality control program and included the following program parameters: (1) performance checks of radiation measurement systems; (2) intralaboratory analytical comparisons including replicate samples, sample blanks, spiked samples, the latter two being submitted unknown; (3) interlaboratory analytical comparisons involving the EPA Cross-check Program; (4) computational checks. Inspection disclosed that the subject analytical quality control program was consistent with Eberline's procedures, licensee

Administrative Procedure No. 01-S-08-9 Revision 3, and guidance promulgated in Regulatory Guide 4.15. The inspector had no questions regarding this item.

7. Management Controls

- a. Inspection included a review of management controls and specific discussions with cognizant licensee representatives regarding management controls addressing preoperational radiological environmental monitoring as defined in licensee Administrative Procedure No. 01-S-08-09 Revision 3. The following items were reviewed: (1) responsibility assigned to organizations and individuals assuring implementation of the preoperational monitoring program defined in Section 6.1.5 of the Environmental Report; (2) responsibility assigned for sample collection, operation and maintenance of sampling equipment and stations; (3) qualifications of individuals managing the program; and implementing sample collection and sample station operation, maintenance and equipment calibration, where required; (4) periodic audit of the preoperational monitoring program. Inspection disclosed that organizational and individual responsibility for assuring program implementation was consistent with the referenced procedure requirements. There were no questions regarding this item.
- b. Inspection involved a detailed review (and discussions with cognizant licensee representatives) of quality assurance audits and program reviews conducted during the period December 1978 through February 1981. Review included each audit and program review checklist, responses to deficiencies identified, and closures of such deficiencies by the Quality Assurance Organization. Inspection disclosed that deficiencies identified were corrected within the assigned time periods. There were no questions regarding this item. Audits and Program Reviews inspected are listed below:

Program Review No. 00001-81 (2/4/81)

Plant Quality Monitoring Report No. 00009-80 (11/21/80)

Program Review No. 00001-80 (1/16/80)

Monitoring Audit Report 80/43 (5/21/80)

Internal Project Audit No. 28 (4/3 - 4/79)

Program Review No. 00007-79 (2/15/79)

Program Review No. 00001-78 (2/18-19/78)

8. IE Bulletin 81-03

The inspector reviewed the licensee's response to IE Bulletin 81-03 (Flow Blockage of Cooling Water to Safety System Components by Corbicula Sp. (Asiatic Clam) and Mytilus Sp. (Mussel)). The inspector discussed the response with cognizant licensee representatives, and concluded that the monitoring procedure (including visual inspection of safety systems components cooling water paths) developed was adequate and should preclude entrainment of Corbicula Sp. and subsequent fouling of subject safety component cooling water systems. This item was closed out during the exit interview. There were no further questions regarding this item.