

U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Report No. 50-219/82-19

Docket No. 50-219

License No. DPR-16 Priority - Category C

Licensee: GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054

Facility Name: Oyster Creek Nuclear Generating Station

Inspection At: Forked River, New Jersey

Inspection Conducted: August 2 - 6, 1982

Inspectors: Edward G. Greenman / for 9/23/82
J. R. Wray, Radiation Specialist date signed

C. A. Rowe 8/25/82
C. A. Rowe, Radiation Specialist date signed

Approved by: Edward G. Greenman 9/23/82
E. G. Greenman, Acting Chief, Facilities date signed
Radiation Protection Section, Technical
Programs Branch

Inspection Summary:

Inspection on August 2 - 6, 1982 (Report No. 50-219/82-19)

Areas Inspected: Routine, unannounced inspection of licensee action on previous inspection findings; radiation protection instrument calibration; radiation protection training, posting, labeling, and control of radioactive material; ALARA program; and radioactive waste program. The inspection involved 60 inspector-hours onsite by two NRC regional based inspectors.

Results: Of the seven areas inspected, no violations were identified.

DETAILS

1. Persons Contacted

- * P. Czaya, Nuclear Licensing Engineer
- * K. Fickeissen, Director, Plant Engineering
- * P. Fiedler, Vice President and Director, Oyster Creek
- * S. Fuller, Manager, Operations Quality Assurance
- * J. Sullivan, Director, Plant Operations
- * D. Turner, Manager, Radiological Controls
- * J. Thomas, USNRC Resident Inspector

*Denotes those individuals attending the exit interview held August 6, 1982.

The inspectors also interviewed other licensee employees, including members of the Radiological Controls, Radioactive Waste Handling and Transportation, Instrument Calibration and Training staffs.

2. Licensee Action on Previous Inspection Findings

(Closed) Violation (78-05-08): Failure to issue protective clothing in contamination area (Turbine Building Operating Floor, Cs-138 from steam leaks in the Condenser Bay area). The inspector verified that the area is properly posted and paper coveralls, shoe covers, cotton gloves, and skull caps are required for entrance to the area.

(Closed) Unresolved Item (79-JS-05): Radwaste shipment discrepancy, water in cask, tie downs to vehicle improper. The inspector verified that procedures were changed to require a rain cover on the cask and seals on the tiedowns.

(Closed) Unresolved Item(79-18-32): New Radwaste HEPA filter test data not available for review. The inspectors reviewed results of HEPA filter testing performed by MSA on June 13, 1980, February 2, 1981, and March 1, 1982.

(Closed) Inspector Follow-up Item (79-23-04): Review Procedure 651.4.001 to ensure valve alignments after test is in standby readiness and is specified in the procedure. The inspectors reviewed Procedure 651.4.001, "Standby Gas System Test," Rev. 11, dated March 29, 1982, which contained attachment I, "Instructions for Removal From Service and Return to Standby Readiness the Standby Gas Treatment System," dated October 28, 1981. This appears to adequately address the concerns.

(Closed) Inspector Follow-up Item (79-23-05): Review procedure for SBGTS to ensure establishment of a procedure for lab tests. The inspectors reviewed Procedure 651.1.006, "SGTS - Charcoal Filter Methyl Iodine Removal Efficiency Test," Rev. 0, dated March 28, 1980. The procedure requires offsite laboratory testing of charcoal filter

banks in SGTS units be performed in accordance with ANSI N 510-1975, "Testing of Nuclear Air Cleaning System." This appears to adequately address the concern.

(Closed) Inspector Follow-up Item (79-23-08): Review quality assurance of shipping casks per 10 CFR 71.62(c). The inspectors reviewed quality assurance inspection records for shipping casks.

(Closed) Inspector Follow-up Item (79-23-11): Review document distribution to Radwaste Supervisor. The inspectors reviewed document distribution and verified that the Radwaste supervisor receives and maintains applicable documents, including 10 CFR Part 20, Disposal Site Criteria, and copies of licenses.

(Closed) Inspector Follow-up Item (79-23-12): Review Radwaste Organization. The inspectors completed the review of the Radwaste Organization.

(Closed) Inspector follow item (79-23-13): Review planned Radwaste audit to be completed by first quarter of 1980. The inspectors reviewed in-depth audit reports of radwaste operations which were conducted by the Quality Assurance Division on May 16, 1980; November 24, 1980; and January 29, 1981. The audits adequately addressed the concerns.

(Closed) Inspector Follow-up Item (79-23-14): Review revised Radwaste procedures. The inspectors reviewed revised Radwaste procedures and verified they contained appropriate check-offs and verifications of package integrity prior to shipment of radioactive material.

(Closed) Inspector Follow-up Item (79-23-15): Review radiation technician training. The inspectors completed a review of the technician training. (Detail, Section 4)

(Closed) Violation (80-03-01): Failure to evaluate beta monitoring required by 10 CFR 20.201(b). The inspectors verified that corrective actions were adequate and as described in the licensee's response to Region I, dated June 10, 1980.

(Closed) Violation (80-03-02): Failure to use respiratory equipment in accordance with 10 CFR 20.103(c). The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated June 10, 1980.

(Closed) Violation (80-03-03): Failure to follow procedures. The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated June 10, 1980.

(Closed) Violation (80-03-04): Failure to label containers of radioactive material. The inspectors verified during tours of the controlled areas that all containers of radioactive material were properly labeled.

(Closed) Inspector Follow-up Item (80-03-06): Review licensee ALARA program. The inspectors reviewed the licensee's ALARA program. See (Detail, Section 6)

(Closed) Violation (80-11-01): Failure to meet 10 CFR 20.103(a)(3), Air Sampling. The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated July 31, 1980.

(Closed) Violation (80-11-02): Failure to use Process Engineering Controls or other precautionary procedures 10 CFR 20.103(b). The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated July 31, 1980.

(Closed) Violation (80-11-03): Failure to provide personnel monitoring as required by procedure. The inspector reviewed RWP's to assure that extremity dosimetry was provided when needed.

(Closed) Violation (80-11-04): Failure to instruct workers pursuant to 10 CFR 19.12. The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated July 31, 1980.

(Closed) Unresolved Item (80-11-05): Intake of transuranics by two workers. The inspectors' review of licensee smear evaluation and records indicated the workers were exposed to less than ten percent of the quarterly MPC hours.

(Closed) Violation (80-11-06): Failure to prepare procedures consistent with T. S. 6.8.1. The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated July 31, 1980.

(Closed) Inspector Follow-up Item (81-04-01): Revise TIP Room procedure entry requirements of Procedure 915.14. The inspectors reviewed Procedure No. 915.14, Rev. 4, dated May 28, 1982, and verified that it requires the Group Shift Supervisor to maintain keys to the TIP shield room and coordinate access with the Radiation Control and Operations Departments. Procedure 723.3.005 requires access to the TIP room be delayed for 36 hours to permit decay of the detectors and contains precautions for streaming radiation. This appears to adequately address the concerns.

(Closed) Violation (81-04-02): Failure to follow procedure for change of procedures. The inspectors verified that corrective actions were adequate and as described in the licensee's response to the NRC dated July 20, 1981.

(Closed) Inspector Follow-up Item (81-04-03): Instruct Radiation Protection Department in Procedure No. 107. The inspectors verified

that a letter was sent to all Radiological Control personnel on July 17, 1981, emphasizing the need for strict adherence to procedures and that deviations required a temporary change, as specified by Procedure 107. This appears to adequately address the concerns.

(Closed) Unresolved Item (81-04-04): Review breathing air sample to ensure use of grade D air. The inspectors reviewed the results of breathing air samples taken on December 21, 1981, and April 1, 1982, both samples passed all tests for grade F air. The licensee no longer uses the service air system for breathing air.

(Closed) Inspector Follow-up Item (81-04-05): Review Re-Analyses of Breathing Air. The inspector reviewed the re-analyses of the sample and noted it passed the odor test on re-analyses.

(Closed) Inspector Follow-up Item (81-04-06): Review documentation to assure radiation technicians were trained in Procedure No. 915.5. The inspectors verified by review of training records that radiation technicians have been trained in Procedure No. 915.5. Training in this procedure was last given in cyclic training during June 7 - 29, 1982.

(Closed) Inspector Follow-up Item (81-04-07): Review quality assurance oversight of radwaste shipments to assure shipments are inspected on a fixed schedule. The inspectors determined from review of radwaste shipment records that Quality Assurance inspects approximately 70% of the shipments.

(Closed) Inspector Follow-up Item (81-04-08): Review radwaste activities to assure correct weight is being indicated on shipment. The inspector verified by observation that the licensee has obtained a scale and constructed a weighing area. All shipments are weighed, and the correct weight indicated on shipment records.

(Closed) Inspector Follow-up Item (81-04-09): Review whole body count of worker who ingested dust. The inspectors reviewed a letter, dated July 23, 1981, from the worker to the Manager, Radiological Controls. The inspectors noted that the licensee and NRC inspectors' assessment, based on licensee contamination and airborne surveys, was that the individual had not sustained any intake of radioactive material. The inspector reviewed results of a whole body count of the worker, dated August 31, 1981, which indicated no intake of radioactive material.

(Closed) Inspector Follow-up Item (81-04-10): Review directive issued by Radiation Operations Manager to assure that all Radwaste supervisors had received a copy. The inspectors reviewed a copy of the directive and determined it was distributed to all Radwaste supervisors.

(Closed) Inspector Follow-up Item (81-04-11): Review directive and instructions issued to radiation control technicians. The inspector reviewed a copy of the letter, dated July 20, 1981, and observed during tours of the facility that the survey status board at the entrance to the controlled area was up-to-date.

3. Radiation Protection Instrument Calibration

The licensee's program for radiation instrument calibration was reviewed against the requirements of ANSI N323-1978.

The inspectors observed calibration of the high-range calibration device (Eberline 1000B) with R-chambers which were NBS traceable.

The licensee uses a natural uranium source for calibration of beta detection instruments and an AmBe source for neutron instrument calibration.

The inspectors reviewed representative samples of maintenance and calibration records for each type of instrument in use at the facility.

No violations were identified.

4. Radiation Protection Training

The inspectors reviewed the radiological control technician's qualification and training program and discussed the program with members of the training staff.

The review and discussions indicated that the licensee has established a step program which includes six months of classroom study. The curriculum has been evaluated by Cook College, Rutgers University, and approved for college credit hours.

The trainee is assigned a practical factor worksheet which requires sign-offs by his supervisor on procedures and appropriate tasks after completion of the classroom studies. The trainee appears before an oral board upon completion of the practical factor worksheets. If the trainee successfully passes the written and oral examinations, he is promoted to junior technician.

Additional practical factor worksheets and oral boards, plus 4,000 hours' (about two years) experience are required for promotion to senior technician. The inspector expressed concern that promotion to senior technician could occur without the individual having worked a refueling. Licensee representatives stated that since about two years' experience is required for promotion to senior technician, the individual will have worked at least one refueling.

Contractor-supplied radiological control technicians must successfully complete the written, oral, and practical factor examinations required of Oyster Creek employees of equivalent position.

Cyclic training is given to all technicians annually, and re-qualification is required every two years.

The inspectors selectively reviewed training records, test results, training material, and lesson plans. Records indicated that all technicians onsite have completed training and qualification and/or re-qualification, except for three new employees.

No violations were identified.

5. Posting, Labeling, and Control of Radioactive Material

The licensee's control of radioactive material was reviewed against the following regulatory requirements:

- Technical Specification 6.13, "High Radiation Area"
- 10 CFR 20.203, "Caution signs, labels, signals, and controls."

The inspectors toured and reviewed control of radioactive material in the Reactor Building, Turbine Building, and Radioactive Waste Building. The control of radioactive material appeared to be in accord with the requirements.

No violations were identified.

6. ALARA Program

The inspectors reviewed the licensee's ALARA program against the criteria provided in Regulatory Guide 8.8 and discussed the program with members of the Radiation Protection staff.

The inspectors determined that the licensee has a formal program for effecting ALARA personnel exposures. The program is administered by the Radiological Engineering Department. The program includes evaluation and preparation of an RWP/ALARA worksheet for all jobs that have the potential for more than one man-rem exposure. The worksheet becomes an integral part of the RWP maintained at the worksite. There is a pre-job briefing by the supervisor with radiation control participation for all RWP work. Expenditure of man-rem vs. % job completion is tracked on a daily basis, and significant variance is investigated. The licensee has the capability to obtain a computer listing for exposure expended on individual RWP's by trade and individual.

Engineering controls, temporary lead shielding, glove bags, leak-off bottles, mock-ups, etc., are used in implementing the ALARA program.

The Radiological Engineering Department reviews all station procedures for radiological concerns. Procedures for specific jobs for the upcoming outage will incorporate ALARA criteria.

The licensee establishes a man-rem goal at the beginning of the year which is approved by the plant manager. The man-rem totals are tracked and updated monthly.

No violations were identified.

7. Radioactive Waste

The inspectors reviewed selected portions of the licensee's radioactive waste program and discussed the program with members of the staff. The inspectors also observed and reviewed the documentation for a waste loading operation on August 5, 1982.

The inspectors reviewed the program against the requirements of 10 CFR 71 and 49 CFR 100 to 199.

The inspectors reviewed the licensee's procedures for compatibility with the above requirements and to determine whether they covered all aspects of the work being done. Selected records were reviewed to verify that procedural requirements are being carried out.

The licensee uses check-off lists to assure that procedures are followed and that packages are properly prepared in accordance with DOT, state and burial site requirements. The completed check-off lists are retained with the radioactive material shipping record.

The inspectors reviewed the records of selected radioactive material shipments made by the licensee during 1982, which included shipments of filter sludge, dewatered resin, LSA compacted trash and contaminated equipment. The records were completed with all shipping paper documentation, including the receipt and shipping survey data.

No violations were identified.

8. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on August 6, 1982. The inspectors summarized the purpose, scope, and findings of the inspection.