

U.S. NUCLEAR REGULATORY COMMISSION
Region I

Report No. 84-18
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: June 1-30, 1984

Inspectors: W. Baunack for 10/3/84
C. Cowgill, Senior Resident Inspector date

W. Baunack for 10/3/84
J. Wechselberger, Resident Inspector date

Approved By: W. Baunack for 10/3/84
E. L. Conner, Chief, Reactor Projects date
Section 1B, DPRP

Inspection Summary: Inspection on June 1-30, 1984 (Report Number
50-219/84-18)

Areas Inspected: Routine Inspection by the Resident Inspectors that included the following items. Three previous inspection findings were closed out in this report. Several shift logs and operating records were reviewed with no significant findings. Numerous facility tours were taken and only one prior operating practice concerning improper IRM ranging was observed. Radiation Protection, Maintenance, Surveillance Testing and Periodic and Special Reports Review activities were observed and no discrepancies were noted. In the Physical Security area, the inspector observed a contract guard failing to conduct an examination of a package; a citation was issued. The inspection totaled 87 inspection hours.

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DETAILS

1. Persons Contacted

T. Brownridge, Maintenance and Construction Jobs Manager
M. Budaj, Manager, Plans and Programs
J. Fidler, Manager, Communication Services, Oyster Creek
P. Fiedler, Vice President and Director, Oyster Creek
V. Foglia, Operational M/pm and Surveillance Manager
E. Growney, Safety Review Manager
D. Holland, Oyster Creek Licensing Manager
J. Knubel, Nuclear Security Director
M. Laggart, BWR Licensing Manager
B. Leavitt, Deputy Manager, Radiological Controls
D. Long, Plant Security Supervisor, Oyster Creek
J. Maloney, Manager Plant Materiel
R. Mc Keon, Manager, Plant Operations
J. Molnar, Core Manager
M. Radvansky, Manager, Tech Functions Oyster Creek site
W. Smith, Plant Engineering Director
J. Sullivan, Plant Operations Director
C. Tracy, Manager, Oyster Creek QA MOD/OPS
D. Turner, Manager, Radiological Controls

The inspectors also interviewed other licensee personnel during the inspection including management, clerical, maintenance, and operations personnel.

2. Review of Previous Inspection Findings

Closed (Inspector Followup Item) 81-12-04: Secondary containment integrity was broken when an operator incorrectly restored normal reactor building ventilation upon completion of a standby gas treatment system surveillance. In restoring normal ventilation flow, the operator failed to start the reactor building supply fans after starting the exhaust fans. The licensee committed to revising Procedure 329, "Reactor Building Heating, Cooling, and Ventilation System", to prevent a recurrence. The procedure has been revised to insure correct operating practices are followed. A caution statement has been included in the procedure immediately prior to starting the exhaust fans. The caution advised the operator to immediately start the supply fans after starting the exhaust fans to preclude damage to the ventilation system ducts and filters.

Closed (Unresolved) 81-14-04: Inspection Report 81-14 raised concerns regarding Group Shift Supervisors' (GSS) ability to recognize and correctly interpret technical specification considerations of an event. As a result of these concerns, the licensee developed a technical specification training session to increase the GSS's ability to interpret Oyster Creek technical specifications. The initial training session was conducted by the licensing

supervisor and was approximately four hours in duration. The original lesson plan has been revised and delivered by the operator licensing group in the training department for the last two operator requalification cycles. Additional training has been conducted on licensing amendments as they become accepted. The licensing amendment training and modification training have both covered the necessary technical specification training on the recent plant modifications. In addition, the licensee training records were examined to determine GSS attendance and successful completion. No discrepancies were noted.

Closed (Inspector Followup Item) 81-16-02: Personnel errors in implementing Procedure 610.03.005, "Core Spray System Instrument Channel Calibration and Test" allowed chromated water from the core spray system to flow into the reactor. The operator had incorrectly mispositioned valves to the open position. The procedure required the valve breakers to be opened with the valve remaining shut. In addition, the operator did not de-energize the core spray injection valve, which automatically opens when reactor pressure decreases below 285 PSIG. (The reactor was in a cold shutdown condition with reactor pressure less than 285 PSIG.) This improper valve lineup provided a flow path for the core spray system fill pump to discharge to the reactor vessel. The licensee committed to revise the procedure to reduce the chance of misreading the procedural steps. The valve and valve breaker manipulations have been separated into two distinct steps in the procedure. In addition, the terms "open" and "close" are used to refer to valve manipulations, while the terms "on" and "off" refer to breaker movements.

3. Plant Operations Review

3.1 Shift Logs and Operating Records

Shift logs and operating records were reviewed to verify that they were properly filled out and signed and had received proper supervisory reviews. The inspector verified that entries involving abnormal conditions provided sufficient details to communicate equipment status and followup actions. Logs were compared to equipment control records to verify that equipment removed from or returned to service were properly noted in operating logs when required. Operating memos and orders were reviewed to insure that they did not conflict with Technical Specification requirements. The logs and records were compared to the requirements of Procedure 106, "Conduct of Operations", and Procedure 108, "Equipment Control". The following were reviewed:

- Control Room and Group Shift Supervisor's Logs, all entries;
- Technical Specification Log;

- Control Room, and Shift Supervisor's Turnover Check Lists;
- Reactor Building and Turbine Building Tour Sheets;
- Equipment Control Logs;
- Standing Orders;
- Operational Memos and Directives.

3.2 Facility Tours

The inspector frequently toured the following areas:

- Control Room (daily)
- Reactor Building
- Turbine Building
- Augmented Off-Gas Building
- Rad-Waste Buildings
- Cooling Water Intake and Dilution Plant Structure
- Monitor and Change area
- 4160 Volt Switchgear, 460 Volt Switchgear, and Cable Spreading Room
- Diesel Generator Building
- Battery Rooms
- Maintenance Work Areas
- Yard Areas (including Area Perimeter)

The following were observed:

- 3.2.1 During daily control room tours, the inspector verified that the control room manning requirements of 10 CFR 50.54(k), Technical Specifications and the licensee's conduct of operations procedure were met. Shift turnovers were observed for adequacy. Selected control room instrumentation needed to support the cold shutdown, conditions were verified to be operable and indicated parameters within normal expected

limits. Recorders were examined for evidence of abnormal or unexplained transients. The inspector verified compliance with Technical Specification Limiting Conditions for Operation (LCO's) applicable to the cold shutdown conditions and refueling activities, including those relating to secondary containment integrity, and fire protection systems. The inspector closely monitored outage activities and verified that operators and supervisors were aware of work in progress and complied with applicable Technical Specification requirements.

No unacceptable conditions were identified.

- 3.2.2 The inspector examined plant housekeeping conditions including general cleanliness, control of material to prevent fire hazards, maintenance of fire barriers, storage and maintenance of fire fighting equipment, and radiological housekeeping. During routine plant tours, the inspector noted that housekeeping was degraded due to the level of outage activity. The inspector will continue to observe this area in future inspections.

No unacceptable conditions were identified.

- 3.2.3 On June 5, 1984, the licensee calibrated nuclear instrumentation source range monitor (SRM) drawers 21 and 22. The inspector verified that SRM's 21 and 22 were operable prior to any fuel movements.

On June 20, 1984, during a tour of the control room, the inspector discovered the Intermediate Range Monitor (IRM) 12 ON RANGE "2" and IRM 14 bypassed for maintenance. IRM's 12 and 14 are in the same reactor protection system channel. Good operating practice would dictate that IRM 12 should have been on range "1". The control room operators were questioned regarding IRM 12 range "2" position. The operators indicated that IRM 12 was upranged to avoid spurious half scrams.

A meeting with the Plant Operations Director and the Manager of Plant Operations was held to express the inspector's concern. The Licensee agreed with the inspectors that upranging IRM's was a poor operating practice and would admonish the operator involved. An operations department memo was issued advising operators against upranging IRM's and disciplinary action that would result if the IRM's were upranged. The inspectors had no further questions.

4. Radiation Protection

During entry to and exit from radiation controlled areas (RCA), the inspector verified that proper warning signs were posted, personnel entering were wearing proper dosimetry, that personnel and materials leaving were properly monitored for radioactive contamination and that monitoring instruments were functional and in calibration. Posted extended Radiation Work Permits (RWP's) and survey status boards were reviewed to verify that they were current and accurate. The inspector observed activities in the RCA to verify that personnel complied with the requirements of applicable RWP's and that workers were aware of the radiological conditions in the area.

5. Physical Security

During daily entry and egress from the protected area, the inspector verified that access controls were in accordance with the security plan and that security posts were properly manned. During facility tours, the inspector verified that protected area gates were locked or guarded and that isolation zones were free of obstructions. The inspector examined vital area access points to verify that they were properly locked or guarded and that access control was in accordance with the security plan.

On June 4, 1984, the inspector observed a contract guard coming through the protected area portal at the main gate with a hand carried package. The contract guard carried the package into the protected area without the package being searched. The physical security plan requires that all hand carried packages be searched before entering the protected area. Failure to conduct a physical search or examination of the package is a violation of the Security Plan. The package contained personal items. The guard is no longer employed at the site. (219/84-18-01)

6. Significant Licensee Meeting Attendance

On June 22, 1984, the inspector and one Region 1 Project Section Chief met with licensee representatives relative to a readiness assessment inspection to discuss corrective actions from findings identified in IE inspection 84-09 and described in a letter to the NRC, dated June 15, 1984. Specifically, the inspector discussed actions taken to correct deficiencies identified in a licensee audit conducted at the request of the NRC.

Licensee representatives stated that all deficiencies noted as a result of Audit 0-OC-84-02/5-OC-84-11, were being specifically tracked and that all items identified would be reviewed and closed out by the Quality Assurance Department. Additionally, as a result of the design review conducted, the licensee decided to conduct a design review of all Appendix J modifications.

Licensee representatives stated that a supplemental response to inspection report 50-219/84-09 would be submitted to clarify the action described at the meeting and present the results of the additional design reviews.

7. Maintenance

The inspector observed maintenance activities to verify that activities were properly approved, operations personnel were cognizant of activities in progress, proper procedural controls were in effect, redundant systems and components were available when required, test instrumentation was calibrated, activities were performed in an acceptable manner by appropriately qualified personnel, and appropriate radiological precautions were taken. Portions of the following activities were observed:

- Cable tray installation
- Cable spreading project tunnel erection
- Control Room alarm panel modification
- Torus painting
- Control Rod Drive return line modification
- Condensate and Feed System Work
- SRM/IRM dry tube replacement
- Dilution Pump overhaul
- Isolation Condenser piping repair
- Shutdown cooling system valve replacement
- Post Accident Sampling Modification
- Diesel Generator annual inspection and cable repair

The inspector reviewed video tapes that the licensee made of the fuel channels adjacent to the cracked IRM/SRM dry tubes (being replaced). The taping was conducted to determine if the dry tubes had caused any damage to the adjacent channels.

Based on the video tape review, the following channels may have been damaged:

4-B-18, 4-C-3, 21-20, UD-7-067

The following channels appeared to exhibit pitting corrosion:

UD-7-067, UD-6-052, UD-5-014

The licensee has not completed taping all the fuel channels and retaping the channels of interest. In addition, technical functions plans to perform an analysis and issue a report on their findings. At present, the licensee will issue a deviation report and will replace one channel. (219/84-18-02)

On June 25, 1984, the inspector made an entry in the torus to examine the epoxy paint coating after the heat cure process and to participate in the final walkdown of the TORUS prior to flooding. The inspector was accompanied by the licensee's Manager of Plant Operations, Maintenance and Construction project manager, a group shift Radiological Controls (RADCON) supervisor and RADCON technicians and two quality control inspectors. All remaining ladders and lighting fixtures were removed at the completion of the walkdown. The walkdown included a close examination of all bays in the suppression chamber, the vent header and vents, and the downcomers from the drywell to the vent header. All suction strainers were in place.

No discrepancies were noted.

8. Surveillance Testing

The inspector reviewed the following surveillance tests to determine if the tests were included on the master surveillance schedule, the test was technically adequate and had been performed at the required frequency.

- 620.4.005 The Intermediate Range Monitor Test and Calibration (Front panel test) Revision 6, 5/12/84
- 651.4.001 Standby Gas Treatment System Test Revision 15, 2/17/84
- 645.4.001 Fire Pump Operability Test Revision 17, 6/29/84

No unacceptable conditions were identified.

9. Review of Periodic and Special Reports

Upon receipt, periodic and special reports submitted by the licensee pursuant to Technical Specification 6.9.1 were reviewed by the inspector. This review included the following considerations: the report includes the information required to be reported to the NRC; planned corrective actions are adequate for resolution of identified problems; and that the reported information is valid. The following periodic report was reviewed by the inspector.

May Monthly Operating Report

10. Exit Interview

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss the inspection scope and findings.

A summary of findings was presented to the licensee at the end of this inspection.