U.S. NUCLEAR REGULATORY COMMISSION

Region I

Report No.	50-219/82-25	
Docket No.	50-219	
License No.		Category C
Licensee:	GPU Nuclear Corporation	
	100 Interpace Parkway	
	Parsippany, New Jersey 07054	
Facility Na	me: Oyster Creek Nuclear Generating Station	
Inspection	Forked Diver New Jersey	
Inspection Inspectors:	Conducted: October 7 - November 9, 1982	11/15/82
Thispec cor s.	C. Cowaill, Senior Resident Inspector	date signed
	Thomas, Resident Inspector	11/18/82 date signed
Annound h	Lazarus, Project Engineer	11/19/82
Approved by	V. E. Tripp, Chief, Reactor Projects Section 2A	date signed

Inspection Summary: October 7 - November 9, 1982 (Report No. 50-219/82-25).

Routine regular and backshift resident inspection (169 hours) including review of licensee action on previous inspection findings, review of plant operations, log and record review, facility tours, radiation protection, physical security, surveillance testing, review of TMI Task Action Plan Items, inoffice and onsite review of licensee event reports, review of periodic and special reports.

Results: One Violation (Violation of physical security procedures, detail 5).

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DETAILS

1. Persons Contacted

T. Brownridge, Maintenance and Construction

J. Carroll, Director, Plant Operations

P. Fiedler, Vice President and Director, Oyster Creek

G. Growney, Safety Review Manager

M. Laggart, Manager, Oyster Creek Licensing

R. Mc Keon, Manager, Plant Operations

J. Riggar, Security Supervisor

T. Snider, Manager, Rad-Waste Operations

P. Scallon, Radiological Field Operations Manager

J. Sullivan, Plant Operations Director

D. Turner, Radiological Controls Manager

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

2. Review of Previous Inspection Findings

(Closed) Unresolved Item (80-01-01) Licensee evaluate more ext nsive 100 ton crane preventive maintenance program. The inspector reviewed Procedure 757.1.001, Maintenance and Inspection of the Reactor Building Overhead Crane, revision 0, dated February 10, 1982, associated schedules, and selected maintenance check lists. The procedure provides frequency, precautions and limitations, and general acceptance criteria. Monthly and annual requirements include NDE testing, lubrication, oil changes, general mechanical, electrical, and operational inspections. Check lists provide specific direction for each inspection. The inspector observed the performance of one monthly preventive maintenance check on the Reactor Building 100 ton crane. No unacceptable conditions were identified.

(Closed) Unresolved Item (80-07-01) Establish system for followup of IE Circulars. (Closed) Unresolved Item (81-06-04) Establish system for tracking issues identified by Bulletins, Circulars, and NRC inspection reports. The licensee has fully implemented Technical Functions Division Procedures LP-002, "Regulatory Correspondence Management and Commitment Control" dated March 1, 1982. The procedure provides for review of incoming correspondence from regulatory agencies by the site licensing supervisor. Correspondence included are NRC Bulletins, Circulars, Information Notices, Inspection Reports, and other licensing correspondence. Action items are assigned tracking numbers and periodic printouts of action item status receive management review. Individuals assigned action items document closeout actions for management and licensing supervisor review. Appropriate documentation is then filed with the action item file. The inspector reviewed selected action items and verified proper initiating and closeout documentation. No unacceptable conditions were identified.

(Closed) Inspector Follow Item (80-07-03) Licensee to establish system to monitor badge expiration dates. The security department now assigns badge expiration dates only to non-regular employee picture badges. The badge issue Site Protection Officer checks the date on the badge each time it is issued to the individual upon entering the site. All badged personnel are required to complete annual general employee retraining. A monthly list of all personnel due for retraining is provided to the security department who reviews the list daily and removes the badges of those people who have not been retrained. These people are denied site access until the individual has completed retraining or had been granted an extension on the annual retraining. No unacceptable conditions were identified.

(Closed) Unresolved Item (80-09-02) Licensee to locate the job order for repair of drywell fan 1-1 during the 1978 outage. This item resulted from a concern that inadequate repairs to a failed drywell recirculation fan had been performed during the 1978 outage. A physical inspection by a region based inspector in March 1980 found all drywell recirculation fans in good working condition, however, documentation on previous repairs could not be located. The licensee has located and properly filed the documentation. The inspector reviewed job order 1878M completed October 15, 1978, for belt change and lubrication of all five recirculation fans, and job order 0731E completed December 3, 1978, for repair of failed motor bearings on drywell recirculation fan 1 - 1.

(Closed) Violation (80-19-01) Failure to follow procedure 501. (Closed) Violation (81-01-02) Failure to follow procedures when no action was taken on control room alarms. (Closed) Violation (81-16-03) Failure to follow core spray surveillance procedure 610.3.005. These violations have been discussed by licensee management with the individuals involved and with all members of the operations department. Several memos have been written to operations department personnel discussing the importance of followup on annunciators and alarms, and the importance of procedural compliance. The most recent memo dated October 15, 1982, reemphasized to operations department personnel, the licensee's policy of operating and maintaining the facility in accordance with approved written procedures. Frequent observation of plant personnel by the inspectors has noted considerable improvement in the area of procedural compliance.

(Closed) Violation (80-28-01) Inadequate process controls on temporary chemical waste demineralizer. The system was removed from service and modified to prevent spills and overflows of radioactive liquids. The inspector reviewed drawing JCPL 1080-1, revision 1, "Temporary Chemical Waste Demineralizer Clean-up System Modification", and system description "Chem Waste Filter/Demineralizer Clean-up System". The inspector also performed a visual inspection of the system and determined that modifications included replacement of temporary hoses with hard piping, installation of an instrumented overflow tank, and installation of a level monitoring system that provides both control and alarm functions. The system has been returned to service and is operated in accordance with procedure 351.24, revision 1, March 19, 1981, "Temporary Chem Waste Filter/Demineralizer Clean-up System". The inspector had no further questions on this item.

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 was 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 List;
- -- Reactor Building and Turbine Building Tour Sheets;
- -- Equipment Control Logs;
- -- Standing Orders;
- -- Operational Memos and Directives.

No unacceptable conditions were noted.

3.2 Facility Tours

The inspectors frequently toured the following areas:

- -- Control Room (daily)
- -- Reactor Building (all levels)
- -- Turbine Building (all normally accessible areas)
- -- Augmented Off-Gas Building
- -- New Rad-Waste Building
- -- Cooling Water Intake and Dilution Plant Structure
- -- Monitoring Change Area

- -- 4160 Volt Switchgear, 460 Volt Switchgear, and Cable Spreading Rooms
- -- Diesel Generator Building
- -- Battery Rooms
- -- Maintenance Work Areas
- -- Yard Areas (including Protected Area Perimeter)

The following were observed:

- 3.2.1 Control Room Manning was checked against the requirements of 10 CFR 50.54(k) and Technical Specifications. Presence of a senior licensed operator in the control room was verified frequently. No unacceptable conditions were identified.
- 3.2.2 The inspectors frequently verified that selected control room instruments were operating and indicated values within technical specification limits. Daily, when the inspectors were on site, ECCS availability was verified by examining switch and breaker position indicators in the control room. Control room recorders were examined for evidence of unusual or unexplained plant transients. On October 29, 1982, a 43 megawatt electric (MNe) power reduction was made at about 5:30 a.m. followed by a return to full power at about 6:15 a.m.. The inspector noted that the transient was shown on all applicable recorders except the reactor feed flow recorder. The feed flow recorder showed a feed water flow rate change corresponding to a power change of only about 20 MWe. The inspector questioned the operators and operations department management who concurred that the response of the feed flow recorder was not in line with the transient that occurred and fullitted a maintenance work order to investigate. On November 30, 1982, the licensee informed the inspector that a worm pen drive gear was found and replaced on the recorder. The worn gear prevented the recorder pen from deflecting the full distance in proportion to the feed flow signal change. The inspector had no further questions.
- 3.2.3 Selected alarmed annunciators were discussed with control room operators and supervision to assure they were knowledgeable of plant conditions and that corrective action, if required, was being taken. The operators were knowledgeable of alarm status and plant conditions.
- 3.2.4 The inspector observed visible portions of the plant stack radiation recorders and periodically reviewed traces from backshift periods to verify that radioactive gas release rates were within limits and that unplanned releases had not occurred.

- 3.2.5 Systems and components were examined for evidence of abnormal vibration. Selected pipe hangers and seismic restraints were visually examined for indications of mechanical interference or fluid leaks. No unacceptable conditions were identified.
- 3.2.6 The inspector examined equipment for evidence of fluid leaks. The calculated identified and unidentified leak rates into primary containment were reviewed. No unacceptable conditions were identified.
- 3.2.7 The inspector verified operability of selected safety equipment by in-plant checks of valve positioning, control of locked valves, power supply availability and breaker positioning. Selected major components were visually inspected for leakage, proper lubrication, operating air supply, and general conditions. Systems checked included the 4160 and 460 volt electrical distribution system, Core Spray System, Containment Spray System, Control Rod Drive Hydraulic System, and Standby Liquid Control System.

Equipment Control procedures were examined for proper implementation by verifying that tags were properly filled out, posted, and removed as required, that jumpers were properly installed and removed, and that equipment control logs and records were complete.

The inspector noted that a major revision to the licensee's equipment control procedure was approved by the Plant Operations Review Committee in late October. The revision will change the system of approving and documenting equipment tag outs, jumpers, and lifted electrical leads. The licensee stated that the procedure will be issued in early November for a review and familiarization period prior to its implementation in early December 1982. A comprehensive training program on the new procedure will be completed during that time. The inspectors will closely monitor the implementation of the new procedure.

No unacceptable conditions were identified.

3

3.2.8 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.

No unacceptable conditions were identified.

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. The inspector periodically performed independent surveys to confirm the accuracy of the licensee's postings.

No unacceptable conditions were noted.

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. Vehicles onsite were periodically observed to verify proper controls.

On October 21, 1982, at about 10:00 a.m., the inspector entered the core group office and observed an individual with a visitors badge accompanied by two licensee employees, one of whom was the visitor's authorized escort. Shortly after the inspector entered, both licensee employees departed, leaving the visitor unescorted. The inspector, realizing the visitor was unattended, kept him under observation until the escort returned, and informed the escort of the procedural requirements on visitor escort.

On October 21, 1982, at about 2:00 p.m., the inspector was observing activities on the refueling floor. He saw an individual wearing a visitor's badge enter the refueling floor, a vital area, without an escort. The escort, who was a member of the core group, was still outside the vital area door entering his access number in the card reader to gain admittance to the area. The inspector stopped the visitor and kept him under observation until the escort arrived and discussed proper visitor control with the escort.

In both of these events, the inspector maintained the visitor under observation until the escort arrived. Thus, there was no breach of security or security violation. However, these events are indicative of a general lack of knowledge of the visitor escort requirements by plant personnel. This was discussed with the licensee who acknowledged the inspector's concern and stated that additional instructions would be given to plant personnel.

On October 28, 1982, at about 2:00 p.m., the inspector observed an unescorted visitor in the auxiliary office building. The visitor stated that the escort had left the building several minutes before. The inspector contacted the licensee who immediately provided an authorized escort for the visitor. Failure to continuously escort a visitor in the protected area is a violation (219/82-25-01).

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6. Surveillance Testing

The inspector observed surveillance to verify that testing had been properly approved by shift supervision, control room operators were knowledgeable of testing in progress, approved procedures were being used, redundant systems or components were available for service as required, test instrumentation was calibrated, work was performed by qualified personnel, and test acceptance criteria were met. Completed documentation was also reviewed. Parts of the following tests were observed:

- -- Procedure 610.3.005, Core Spray System Instrument Channel Calibration and Test, revision 17, August 17, 1982, completed on October 28, 1982.
- -- Procedure 607.4.003, Containment Spray and Emergency Service Water Pump Inservice Test, revision 5, August 3, 1982, completed on November 5, 1982.
- -- Procedure 636.4.003, Diesel Generator Load Test, revision 14, September 13, 1982, completed on November 8, 1982.

No unacceptable conditions were identified.

7. Review of TMI Task Action Plan (TAP) Item II.B.4.1 (NUREG 0737)

Science Applications, Inc. (SAI), as technical assistance contractor to the NRC, evaluated the licensee's response to TMI TAP Items I.A.2.1.4, Upgrading of Reactor Operator and Senior Reactor Operator Training and Qualifications, and II.B.4.1, Training for Mitigating Core Damage. The training performed under requirement II.B.4.1 was to be given to, "Shift Technical Advisors and Operating Personnel from the plant manager through the operations chain to the licensed operators". SAI noted in its review, that the licensee had not given this training to the Director of Station Operations (DSO), the highest ranking official onsite responsible for overall facility operation per Technical Specification 6.1.1. In a subsequent discussion with the cognizant NRC:RI Project Engineer, it was determined that the licensee had incorrectly interpreted "plant manager" as being equivalent to their Plant Operations Director rather than the DSO. The Project Engineer informed the licensee that "plant manager" was intended to refer to the individual responsible for overall facility operation per Technical Specifications. With this clarification, the licensee agreed to give this training (as outlined in Enclosure 3 to Denton's letter to all licensees dated March 28, 1980) to the Vice President and Director, Oyster Creek and Deputy Director, Oyster Creek as they will be assuming the responsibility for overall facility operation under a proposed change to Technical Specifications which is expected to be approved shortly. Completion of administration of this training will be reviewed in a subsequent inspection (219/82-25-02).

8. Review of Licensee Event Reports (LER's)

8.1 The inspector reviewed LER's received in the NRC:Rl and Resident Office to verify that details of the event were clearly reported including the accuracy of the description of cause and adequacy of corrective action. The inspector also determined whether further information was required from the licensee, whether generic implications were involved, and whether the event warranted further on-site followup. The following LER's were reviewed:

	LER	EVENT
*	82-43/3L	Operation in a degraded mode when an inspection port cover plate was not in place on Standby Gas Treatment System II.
	82-47/3L	Reactor Protection System (RPS) Motor Generator I failed and could not supply power to RPS panel 1.

- 8.2 For those LER's selected for on-site followup, the inspector verified that reporting requirements of Technical Specifications and Regulatory Guide 1.16 had been met, that appropriate corrective action had been taken, that the event was reviewed by the licensee as required by facility procedures, and that continued operation of the facility was conducted in accordance with Technical Specification limits. The LER's selected for on-site followup are denoted by an asterisk (*) in detail 8.1 above. The following specific observations were made and discussed with licensee management.
 - LER 82-43/3L: This event was discussed in NRC Inspection 50-219/82-22 and was considered an unresolved item pending further review to determine the cause of the inspection cover being removed. The inspector discussed the event with cognizant licensee personnel and reviewed the report of the licensee's critique conducted on October 5, 1982. It was determined that the inspection cover had been replaced following filter testing on September 23, 1982, however, the latches had been improperly engaged. Vibration of the ducting caused the latches to loosen and the negative pressure in the suction duct pulled the cover into the duct. The critique will be reviewed by all operations and maintenance department personnel and will include a sketch of the proper method of engaging the latches. The testing procedure will be changed to more clearly specify proper latching of the cover and the engineering staff will review the design of the latch for possible modifications to make improper closure less likely.

The inspector concluded that the licensee had adequately identified the cause of this event and taken appropriate corrective actions to prevent recurrence. Unresolved item 219/82-22-02 is considered closed.

9. Review of IE Circulars

Licensee actions concerning the following IE Circulars were reviewed to verify that the circular was received by licensee management, that a review for applicability was performed, and that action taken or planned is appropriate.

-- IE Circular 80-11: Emergency Diesel Generator Lube Oil Cooler Failures.

This circular recommended that licensees verify the compatability of the Emergency Diesel corrosion inhibitor with materials wetted by the cooling water. Additionally, proper monitoring and a review of engine maintenance history was requested. The licensee confirmed that the corrosion inhibitor (chromate) was that recommended by the manufacturer, General Motors, and reviewed maintenance history and identified no problem.

The inspector confirmed that chromates were recommended. During review of this circular, the licensee told the inspector that a change of corrosion inhibitor is planned. The product is also on the manufacturers approved list.

-- IE Circular 81-06: Potential Deficiencies Affecting Certain Foxboro 10-50 Milliampere Transmitters.

NRC requested that licensees determine whether Foxboro 10 to 50 milliampere transmitters with certain serial numbers were used in safety related systems. Licensee review determined that no Foxboro transmitters are in use at Oyster Creek. The inspector had no further questions on this matter.

10. Review of Periodic and Special Reports

Periodic and special reports submitted by the licensee pursuant to Technical Specifications 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. Within the scope of the above, the following reports were reviewed:

-- September 1982 Monthly Operating Report

No unacceptable conditions were identified.

11. Unresolved Items

Unresolved items are matters about which more information is required in order to determine whether they are acceptable items, items of noncompliance, or deviations. The unresolved items reviewed during this inspection are discussed in paragraphs 2 and 8.2.

12. Exit Interview

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss inspection scope and findings. A summary of findings was presented at the conclusion of the inspection.