U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-219/85-30

Docket No. 50-219

License No. DPR-16

Licensee: GPU Nuclear Corporation

P.O. Box 388

Forked River, New Jersey

Facility Name: Oyster Creek Nuclear Generating Station

Inspection At: Forked River, New Jersey

Inspection Conducted: October 1 - 4, 1985

Date of Last Material Control and Accounting Inspection: October 20 - 22, 1982

Type of Inspection: Unannounced Material Control and Accounting

Inspector: _____ 12-20-85
A. Della Ratta, Safeguards Auditor date

Approved by: _____ 12-20-85
R. R. Keimig, Chief, Safeguards Section, date
Nuclear Materials Safety and
Safeguards Branch

Inspection Summary: Routine, Unannounced Inspection on October 1 - 4, 1985 (Inspection Report No. 50-219/85-30)

Areas Inspected: Facility organization and operation, measurement and controls, shipping and receiving, storage and internal control, physical inventory, records and reports, and management of material control systems. The inspection invoived 28 hours on site by a regional based inspector.

Results: One violation was identified (failure to follow procedures which require the fuel location history card (Kardex) file to be maintained on a current basis (paragraph 5.e).

DETAILS

1. Persons Contacted

*P. Fiedler, Vice President and Director, Oyster Creek
W. Smith, Plant Engineering Director
D. Turner, Radiological Controls Director O.C.
*A. Rone, Manager Operations Engineering
*J. Molner, Core Manager
*D. Notigan, Core Engineer
*J. Rogers, Licensing Engineer
*W. Bateman, NRC Senior Resident Inspector
*J. Wechselberger, NRC Resident Inspector

*Present at exit interview

2. 30703 - Exit Interview

The inspector met with the licensee representatives (denoted in paragraph 1) on October 4, 1985, and summarized the scope and findings of the inspection.

At no time during this inspection was written material provided to the licensee by the inspector.

3. Licensee Action on Previous Inspection Findings

(Closed) Inspector Follow-Up Item (82-27-01). The licensee agreed to revise the plant operating procedures (Series 200 and 1000) to reflect current practices, and to incorporate the accountability of all detectors containing special nuclear material (SNM) in the applicable sections of the procedures. The inspector reviewed the applicable plant operating procedures and determined that the procedures had been revised to reflect current practices and to provide for the accountability of all detectors containing SNM in the applicable sections.

4. 92713 - Independent Inspection Effort

The inspector observed that visitors were being monitored with a walk-through metal and explosive detector and a hands-on search prior to entry into the protected area and that packages were inspected using an x-ray device.

5. 85102 - Material Control, Accounting

a. Organization and Operation

The inspector verified through review that the licensee had maintained written procedures for nuclear material control and accounting

and that statements of responsibility and authority existed for those positions with responsibility for special nuclear material (SNM).

b. Measurement and Controls

The licensee had maintained, and was utilizing a method of computing thermal output, uranium/uranium-235 depletion and plutonium production.

The inspector determined that the licensee's computer tabulation summary of total uranium and uranium-235 depletion and plutonium production agreed with the totals reported on the DOE/NRC-742's submitted between April 1, 1982, and March 31, 1985.

c. Shipping and Receiving

The inspector determined through review that the licensee had maintained procedures to assure that all special nuclear material shipped or received was accurately accounted for.

The licensee had thirty-six receipts of SNM since April 1, 1982. A review was performed of all DOE/NRC Form - 741 generated for those transactions to determine proper signature, timely dispatch, and accuracy of data. No discrepancies were noted.

d. Storage and Internal Control

The inspector determined through review that the licensee was maintaining and following a system of written material, control and accounting procedures which provided for the knowledge of the quantity, identity, and location of SNM within the facility, with one exception which is discussed in paragraph 5e.

Storage areas were maintained and included the reactor core, fuel pool, new fuel storage vault, and other areas that were appropriate for SNM contained in other than reactor fuel.

e. Physical Inventory

The inspector reviewed the licensee's records for the physical inventory performed on September 24, 1985. The review consisted of a piece count of the fuel assemblies as shown on the licensee's fuel storage map and a comparison of the fuel location history card (Kardex) file to the core loading and fuel storage map. Fuel bundles were located as follows:

Location	Bundles
Reactor Core	560
Spent Fuel Pool	1204
New Fuel Storage Vault	4
Total Bundles	1768

During the review of the physical inventory records, the inspector noted that the fuel location history cards (Kardex) file had not been updated to reflect the current location of certain fuel bundles located in the spent fuel pool as required by the Oyster Creek Nuclear Generating Station Procedure 1002.4, Revision 9 to comply with 10 CFR 70.51(c). The relocation of the fuel bundles occurred on August 25 and 26, 1984, as shown on SNM Move Sheet Nos. 84-123, 84-124, and 84-125. Failure to maintain the necessary records and follow the established procedure was identified as a violation (85-30-01).

The inspector also reviewed the source inventory records to determine inventory control of various detectors containing SNM. No discrepancies were noted.

Additionally, the inspector reviewed and determined that the licensee had taken physical inventories, as required by 10 CFR 70.51 (d).

f. Records and Reports

The inspector reviewed the licensee's records, reports and source data. All Material Balance Reports (DOE/NRC Form-742) submitted by the licensee during the period of April 1, 1982 to March 31, 1985 were reviewed as were all Nuclear Material Transaction Reports (DOE/NRC Form-741). Total uranium and U-235 fission, transmutation and plutonium production and decay records were also reviewed. No discrepancies were noted.

Attached to this report as Exhibits I and II is a summary of the licensee's SNM activity for the period April 1, 1982 through March 31, 1985.

g. Management of Material Control Systems

The inspector determined that the licensee was maintaining a management system which provided for the revision, implementation and enforcement of nuclear material control and accounting procedures with the exception of the violation discussed in Details paragraph 5.e. There was an organizational structure responsive to the nuclear material control and accounting requirements, pursuant to their license and applicable NRC regulations.

Audits of the site were performed annually by the Quality Assurance Department of General Public Utilities (GPU) Nuclear Corporation. The inspector reviewed the latest audit report (No. 5-OC-85-08 dated September 9, 1985) of SNM control and accounting procedures/practices. The audit team found no discrepancies relative to SNM control and accounting practices.

EXHIBIT I

Oyster Creek Nuclear Generating Station

Docket No. 50-219 License No. DPR-16

Material Balance or Period: April 1, 1982 - March 31, 1985

Reporting Identification Symbol: YHA Reporting Unit: grams

	Enriched Uranium		Normal Uranium	
	Element	Isotope	Element	Isotope
Beginning Inventory: (April 1, 1982)	262,894,421	2,973,274	1,653,666	11,844
Additions:				
From Normal Uranium Account:	1,653,666	11,344	-0-	-0-
Receipts:	27,422,966	465,730	-0-	-0-
Material to Account for:	291,971,053	3,450,848	1,653,666	11,844
Removals:				
To Enriched Uranium Account:	-0-	-0-	-0-	-0-
Shipments:	-0-	-0-	-0-	-0-
Degradation to Other: Materials:	-0-	-0-	1,653,666	11,844
Fission and Transmutation:	18,473,251	708,336	-0-	-0-
Inventory Difference	-0-	-0-	-0-	-0-
Total Removals:	18,473,251	708,336	1,653,666	11,844
Ending Inventory: (March 31, 1985)	273,497,802	2,742,512	-0-	-0-
Material Accounted For:	291,971,053	3,450,848	1,653,666	11,844

EXHIBIT II

Oyster Creek Nuclear Generating Station

Docket No. 50-219 License No. DPR-16

Material Balance or Period: April 1, 1982 - March 31, 1985

Reporting Identification Symbol: YHA Reporting Unit: grams

	Plutonium		Plutonium-238	
	Element	Isotope	Element	Isotope
Beginning Inventory: (April 1, 1982	1,555,871	1,127,726	1.2	1.0
Additions				
Production:	203,965	144.865	-0-	-0-
Receipts:	-0-	-0-	-0-	-0-
Material to Account For:	1,759,836	1,272,591	1.2	1.0
Removals:				
Shipments:	-0-	-0-	-0-	-0-
Decay:	10,297	11,022	-0-	-0-
Inventory Difference (Rounding Error)	(3)	(3)	-0-	-0-
Total Removals:	10,294	11,019	-0-	-0-
Ending Inventory: (March 31, 1985)	1,749,542	1,261,572	1/ 1.2	1.0
Material Accounted For:	1,759,836	1,272,592	1.2	1.0

1/ = 2 sources (Serial Nos. MRPU8BE423, MRPU8BE424).