

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-193/84-01

Docket No. 50-193

License No. R-95

Licensee: Rhode Island Atomic Energy Commission
Nuclear Science Center
South Ferry Road
Narragansett, Rhode Island 02882

Facility Name: Rhode Island AEC

Inspection At: Narragansett, Rhode Island

Inspection Conducted: May 8-9, 1984

Date of Last Material Control and Accounting Inspection: May 13, 1982

Type of Inspection: Unannounced Material Control and Accounting

Inspectors: J.M. Dunlap
J.M. Dunlap, Physical Security
Inspector

6-1-84
date

G.C. Smith
G.C. Smith, Physical Security
Inspector

6-1-84
date

Approved by: R.R. Keimig
R.R. Keimig, Chief, Safeguards
Section, Nuclear Materials and
Safeguards Branch

5-31-84
date

Inspection Summary: Inspection on May 8-9, 1984 (Report No. 50-193/84-01)

Areas Inspected: Facility Organization and Operation; Storage and Internal Control; Physical Inventory; and Records and Reports. The inspection involved 12 inspector-hours onsite by two regional-based NRC inspectors.

Results: The licensee was found to be in compliance with NRC requirements in the areas inspected.

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DETAILS

1. Persons Contacted

- * Dr. A.F. DiMeglio, Director, Rhode Island Nuclear Science Center
- Mr. M.P. Doyle, Assistant Director for Reactor Operations

* denotes presence at the exit interview

2. 30703 - Exit Interview

The inspectors met with a licensee representative (denoted in paragraph 1) at the conclusion of the inspection and summarized the purpose, scope, and findings of the inspection.

3. 92713 - Independent Inspection Effort

The inspectors toured the facility to verify the licensee's possession and use of special nuclear material were in accordance with NRC requirements. No discrepancies were identified.

4. 85102 - Material Control and Accounting

a. Facility Organization and Operation

The inspection was conducted through discussions with licensee management and review of the licensee operating procedures dated March 1984, Chapter 13, Special Nuclear Material Control and Accounting Procedures. No discrepancies were identified.

b. Shipping and Receiving

The inspectors determined there were no shipments or receipts of SNM during the period inspected (April 1, 1982 through March 31, 1984).

During the material control and accounting inspection conducted May 13, 1982, a review of shipping records disclosed that the DOE Savannah River Plant (receiver) reported a difference (higher) of 226 grams uranium-235 and a much higher enrichment for the licensee's shipment numbered ZTF-DZA-3. The inspector checked the licensee's supporting records and noted no differences. This was discussed with a representative of the Savannah River Operations Office, and, on corrected copy No. 1 of Form-741 dated June 29, 1982, the receiver accepted the shipper's measurements.

c. Storage and Internal Control

The licensee has maintained a system of storage and internal control of SNM which provided for current knowledge of the quantity and identity of all SNM within the facility. Perpetual inventory records are maintained for all SNM.

d. Physical Inventory

The licensee has conducted annual physical inventories as required by 10 CFR 70.51(d).

The inspectors conducted a physical inventory of the facility. The results of this inventory verified the listings on the licensee's material status reports. The results were as follows:

6 Fission Counters

1 in reactor
2 on fuel floor
2 in storage
1 in beam port

67 Fuel Assemblies

30 in core
3 in storage
34 in spent fuel pool

e. Records and Reports

The inspection was conducted through an audit of Material Status Reports (NRC Form-742) submitted for the period April 1, 1982 through March 31, 1984, to verify compliance with 10 CFR 70.53.

The material balance summary for the period covered by this inspection is shown in Exhibit I.

EXHIBIT I

Material Balance Summary

Rhode Island Nuclear Science Center

NRC License No. R-95

RIS:ZTF

April 1, 1982 - March 31, 1984

Enriched Uranium

	<u>Uranium</u>	<u>Grams</u>	<u>U-235</u>
Beginning Inventory (April 1, 1982)	8438		7734
Additions: Receipts	<u>- 0 -</u>		<u>- 0 -</u>
Material to Account For	<u>8438</u>		<u>7734</u>
Removals: Shipments	<u>- 0 -</u>		<u>- 0 -</u>
Burn-up	124		149
Ending Inventory (March 31, 1984)	<u>8314</u>		<u>7585</u>
Material Accounted For	<u>8438</u>		<u>7734</u>