

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-193/86-01

Docket No. 50-193

License No. R-95

Licensee: Rhode Island Atomic Energy Commission
South Ferry Road
Narragansett, Rhode Island

Facility Name: Rhode Island AEC

Inspection At: Shipment Point of origin at Narragansett, Rhode Island and enroute through Rhode Island and Connecticut

Inspection Conducted: January 27, 1986

Type of Inspection: Irradiated Reactor Fuel Shipment

Inspectors:

G. C. Smith
G. C. Smith, Safeguards Specialist

2/18/86
date

Approved by:

R. R. Keimig
R. R. Keimig, Chief Safeguards Section
Nuclear Materials and Safeguards Branch

2-19-86
date

Inspection Summary: Inspection on January 27, 1986 (Report No. 50-193/86-01)

Areas Inspected: Routine, announced inspection of an irradiated reactor fuel shipment at the point of origin and while enroute through Rhode Island and portions of Connecticut. The inspection included an examination of the general requirements for shipments of irradiated reactor fuel as well as the requirements for shipments of irradiated reactor fuel by road. The inspection involved 5 hours by one NRC region based inspector.

Results: No violations were identified in the areas inspected.

Details

1. Key Persons Contacted

- A. DiMeglio, Director, Rhode Island AEC Nuclear Science Center
- M. Doyle, Assistant Director for Reactor Operations
- B. Fagan, Director/Escort, Tri-State Motor Transit Company
- W. Miller, Driver/Escort Tri-State Motor Transit Company
- D. Berbour, Connecticut State Police
- D. Timko, Connecticut State Police

2. Exit Interview

Due to the nature of the inspection, no formal exit interview was held. The results of the inspection were communicated telephonically by the inspector to the Director, Rhode Island AEC Nuclear Science Center on January 28, 1986.

3. Background

Region I was notified by letter dated January 2, 1986, that a shipment of irradiated reactor fuel would be made from the Rhode Island Atomic Energy Commission Nuclear Science Center, Narragansett, Rhode Island to the DOE Savannah River Plant, Aiken, South Carolina. The shipment route was approved by NRC's Office of Nuclear Material Safety and Safeguards on June 4, 1985.

4. 81310 - Transportation of Irradiated Reactor Fuel (General Requirements)

The inspector determined, as described below, that the licensee followed established procedures and NRC regulatory requirements for the physical protection of irradiated fuel in transit.

- a. Verification that there were two driver/escorts with the transport vehicle. Discussions were held with those individuals relative to their training, knowledge of route and procedures, and contingency preparedness.
- b. Examination of the vehicle's tamper seals and verification that the seals were intact when the transport vehicle departed the point of origin.
- c. A functional test of the communications equipment and a review of the drivers' trip plan to confirm that 2 hour check calls to the Tri-State dispatcher in Joplin, Missouri were required by the plan.
- d. Verification, through interviews of the driver/escorts and observations, that the transport vehicle was equipped with an immobilization device.

- e. Verification, through direct measurements, that radiation readings were within NRC regulatory limits.
- f. Verification, through interviews and review of the trip plan, that at least one driver/escort was required to remain with the transport vehicle during fuel/rest stops.