

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 70-1100/85-04

Docket No. 70-1100

License No. SNM-1067

Safeguards Group: III

Licensee: Combustion Engineering, Inc.

P.O. Box 500

Windsor, Connecticut 06095

Facility Name: Combustion Engineering - Nuclear Fuel Manufacturing

Inspection At: Windsor, Connecticut

Inspection Conducted: June 18-21, 1985

Date of Last Material Control and Accounting Inspection: March 4-8, 1985

Type of Inspection: Unannounced Material Control and Accounting

Inspectors:

A. Della Ratta
A. Della Ratta, Safeguards Auditor

7-19-85
date

Harvey Zibulsky
H. Zibulsky, Safeguards Chemist

7-19-85
date

Approved by:

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

7-19-85
date

Inspection Summary: Routine Unannounced Inspection on June 18-21, 1985
(Inspection Report No. 70-1100/85-04)

Areas Inspected: Measurement systems, and Records and Reports. The inspection involved 65 hours by two NRC inspectors.

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

DETAILS

1. Key Persons Contacted

- * T. B. Bowie, Manager, Nuclear Material and Security
- * R. E. Sheeran, Manager, Nuclear Licensing, Safety, Accountability, Criticality, and Security
- G. Kersteen, Manager of Production
- * H. T. Cohen, Supervisor, Nuclear Material Accountability

- * present at exit interview

The inspectors also interviewed other licensee employees involved with nuclear material control and production.

2. 30703 - Exit Interview

The inspectors met with licensee representatives (listed in paragraph 1) at the conclusion of the inspection on June 21, 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 inspectors.

3. 92713 - Independent Inspection Effort

Independent inspection effort was conducted by a tour of the plant, during which the inspectors observed plant operations and personnel handling special nuclear material. No problems were noted.

4. 85207 - Measurement Systems

The inspector reviewed the Windsor SNM Measurement Control-Audit/Review, dated December 20, 1984. The audit closed out a finding of the previous audit, dated January 10, 1984. Measurement standards are currently listed in a controlled document as indicated in the Fundamental Nuclear Material Control Plan (FNMCP). The December review identified seven weaknesses that are being pursued by the licensee. This will be reviewed by the NRC at a subsequent inspection. (Inspector Follow-Up Item 85-04-01).

The inspector observed the licensee sampling green scrap, grinder sludge, screened hard scrap, mixed UO_2 scrap, sintered pellets, ground pellets, and virgin UO_2 powder to be sent to their laboratory and their contractors' laboratories for the U and U-235 analyses. Duplicate samples were taken for the NRC, to be sent to the New Brunswick Laboratory, for independent analyses. On completion of the analyses by all the laboratories, a statistical evaluation will be made by the NRC inspector. This evaluation will determine the adequacy of the licensee's laboratory and their contractors' laboratories. (Inspector Follow-Up Item 85-04-02).

5. 85215 - Records and Reports

The inspector audited the nuclear material control records and reports for the low enriched uranium physical inventory material balance period September 7, 1984, through March 19, 1985. All line items on the SNM inventory report were traced by the inspector to the source documents and cross-checked to the records maintained by the licensee and to the DOE-NMMSS computer tabulations. The licensee's ledgers were add-checked for accuracy for the same period. Nuclear Material Transaction Reports (DOE/NRC Form-741) that documented receipts, shipments, measured discards were reviewed for timeliness, format, and accuracy of content. No discrepancies were identified.

Material Status Reports (DOE/NRC Form-742) submitted for the material balance period ending March 19, 1985 were also reviewed for the same attributes. No discrepancies were identified.

The inspector determined that the licensee's control and subsidiary records for the period under review were adjusted to the results of the physical inventory, as required by NRC regulation.