



R3/D2 # 71

UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 18, 1996

Mr. Robert W. Sharkey, Manager
Regulatory Compliance
Combustion Engineering, Inc.
3300 State Road P
Hematite, MO 63047

SUBJECT: INCREASE POSSESSION LIMIT (TAC. NO. L30919)

Dear Mr. Sharkey:

In accordance with your application dated October 23, 1996, and pursuant to Part 70 to Title 10 of the Code of Federal Regulations, Materials License SNM-33 is hereby amended to increase the possession limit for uranium enriched to a maximum of 5.0 weight percent in the U-235 isotope from 12,000 kilograms of U-235 to 20,000 kilograms. Accordingly, Safety Condition S-1 is revised to include the date of October 23, 1996, and Condition 8A is amended to reflect the change in the possession limit.

All other conditions of the license shall remain the same.

Enclosed are copies of the revised Materials License SNM-33 and the Safety Evaluation Report, which includes the Categorical Exclusion determination.

Sincerely,

A handwritten signature in cursive script that reads "Michael F. Weber".

Michael F. Weber, Chief
Licensing Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Docket 70-36
License SNM-33
Amendment 15

Enclosures:

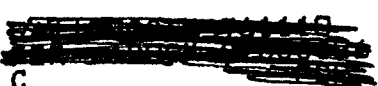
1. Materials License SNM-33
2. Safety Evaluation Report

II-21

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. Combustion Engineering, Inc.		3. License number SNM-33 Amendment 15
2. 3300 State Road P Hematite, Missouri 63047		4. Expiration date July 31, 2004
		5. Docket or Reference No 70-36
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Uranium enriched to maximum 5.0 weight percent in the U-235 isotope	A. Any (excluding metal powders)	A. 20,000 kilograms U-235
B. Uranium, enriched to any enrichment in the U-235 isotope	B. Any (excluding metal powders)	B. 350 grams U-235
C. Source material (uranium and thorium)	C. Any (excluding metal powders)	C. 50,000 kilograms
D. Cobalt-60	D. Sealed sources	D. 40 millicuries
E. Cesium-137	E. Sealed sources	E. 500 millicuries
F. Mixed activation and fission product calibration sources including Am-241	F. Solid sources	F. 200 microcuries
G. Californium-252	G. Sealed sources	G. 4 milligrams
9. Authorized place of use: The licensee's existing facilities in Hematite, Missouri, as described in the license renewal application.		



C

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SNM-33 Amendment 15

Docket or Reference Number

70-36

SAFETY CONDITIONS

10. The license shall be deemed to contain two sections: Safety Conditions and Safeguards Conditions. These sections are part of the license, and the licensee is subject to compliance with all listed conditions in each section.

FOR THE NUCLEAR REGULATORY COMMISSION

Date: NOVEMBER 18, 1976

By: _____

Michael F. Weber

Michael F. Weber

**Division of Fuel Cycle Safety
and Safeguards, NMSS
Washington, DC 20555**

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SNM-33 Amendment 15

Docket or Reference Number

70-36

SAFETY CONDITIONS

SAFETY CONDITIONS

- S-1. Authorized use: For use in accordance with the statements, representations, and conditions in Chapters 1 through 8 of the application dated October 29, 1993, and supplements dated November 24, 1993; January 14, January 28, March 21, April 20, June 14, October 24, and October 26, 1994; January 28, February 27, March 10, April 24, July 27, October 31, and December 15, 1995; and January 26, May 29, and October 23, 1996.
- S-2. The licensee shall conduct an evaluation to determine the source of the contamination to burial site well #4, as shown in Figure 13-2 of the application dated March 21, 1994, and shall identify the contaminants in the groundwater. The findings of the evaluation shall be submitted to the NRC within 180 days of the issuance of this renewed license.
- S-3. Deleted - Hematite Evaporation Ponds Decommissioning Plan approved by Amendment 4 dated May 1995.
- S-4. The licensee is hereby granted the special authorizations in Chapter 1, Section 1.6(a) through 1.6(g) of the renewal application.
- S-5. Deleted - The 4-month delay in completion date of biennial emergency exercise was deleted by Amendment 13 dated June 1996.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

SNM-33 Amendment 15

Docket or Reference Number

70-36

SAFEGUARDS CONDITIONS

SAFEGUARDS CONDITIONS

Section 1.0 - Material Control & Accounting

- SG-1.1 The licensee shall follow Sections 1.0 through 9.0 of its Fundamental Nuclear Material Control Plan dated April 28, 1995. Any revisions to this Plan shall be made only in accordance with the provisions of either 10 CFR 70.32(c) or 70.34.
- SG-1.2 Notwithstanding the requirements of 10 CFR 74.31(c)(5) and Section 5.3.1 of the Plan identified in Condition SG-1.1, the licensee may delay the start of its 1995 physical inventory beyond the currently scheduled deadline of August 15, 1995, so as to start on or before October 25, 1995. To compensate for this delay, the licensee's 1996 physical inventory shall be initiated no later than July 15, 1996.
- SG-1.3 Notwithstanding the requirement of 10 CFR 74.31(c)(8) to independently assess the effectiveness of the material control and accounting system at least every 24 months, the latest due date for issuance of the assessment team report for the next required assessment may be delayed from May 21, 1995, to July 21, 1995.
- SG-1.4 Notwithstanding the commitment in Section 4.3.1 of the Plan identified in Condition SG-1.1 regarding receipt measurements of UF_6 , the licensee may, for the UF_6 shipment specifically identified in its August 14, 1995 letter (from R. W. Sharkey to R. C. Pierson), modify the methodology of determining receiver's values for uranium concentration and U-235 enrichment. In lieu of the measurements normally utilized for UF_6 shipper-receiver comparisons, the licensee may derive its U-235 enrichment measurement from two samples of the UO_2F_2 produced from each UF_6 cylinder in question, and may derive its percent uranium value by using a nominal (historical average) uranium element concentration for UF_6 receipts. The percent uranium and the U-235 isotopic weight fractions thus obtained will be applied to the licensee's cylinder weight measurements to obtain net weight of uranium element and U-235 isotope for each cylinder in the shipment. If no significant shipper-receiver difference (as defined in Section 7.2.5 of the licensee's FNMC Plan) exists, shipper's values may be booked by the licensee.
- SG-1.5 Notwithstanding the requirements of Condition SG-1.1, and in accordance with their letter dated, March 18, 1996, the licensee is not required, per Section 4.3.1 of the Plan, to provide for "witnessed sampling" of the UF_6 cylinders received under work order GES 3048. As an alternate safeguards measure, the licensee will analyze two samples of UO_2F_2 produced from each cylinder during their conversion process to confirm the vendor's measurement of U-235.
- SG-1.6 Deleted - This was deleted by Amendment 14 dated July 1996.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
SNM-33 Amendment 15

Docket or Reference Number
70-36

SAFEGUARDS CONDITIONS

Section 2.0 - Physical Protection for SNM of Low Strategic Significance

- SG-2.1 The licensee shall follow the security plan entitled "Physical Security Plan for Protection of Nuclear Material of Low Strategic Significance" dated May 1980, as revised by Revision 3 dated November 1992 (letter dated November 12, 1992), and as revised in accordance with the provisions of 10 CFR 70.32(e).
- SG-2.2 The licensee shall ensure that the surveillance tour, conducted by the guards or authorized person in accordance with Section 3.1.1, includes surveillance over the UF₆ outdoor storage area.

Section 3.0 - International Safeguards

- SG-3.1 The licensee shall follow all sub-codes within Codes 1 through 6 of the Transitional Facility Attachment No. 14A, with the date of entry into force of December 4, 1995, to the US/IAEA Safeguards Agreement.