November 18, 1996

9 pgs

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,

Original signed by:

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

NFOS

Docket 70-36
License SNM-33
Amendment 15

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

Distribution w/encls (Control No. 6105)

Docket 70-36	PUBLIC	NRC File Center	FCSS R/F
Region III	FCLB R/F	SHO	FCOB
GShear, RIII	PMDA	BHorn, FRIB	NMSS R/F
SChotoo			

*See previous concurrence

OFC	FCLB*	2E	FCLB*	2E	FCLB*	E	FCLB*	E	FCLB*	C	FCLB	
NAME	SSoong		PShea		SChotoo		KHardin		MTokar		MWeber	
DATE	11/12/96		11/12/96		11/13/96		11/15/96		11/14/96		11/18/96	

C = COVER E = COVER & ENCLOSURE N = NO COPY

F-34

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,

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

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.

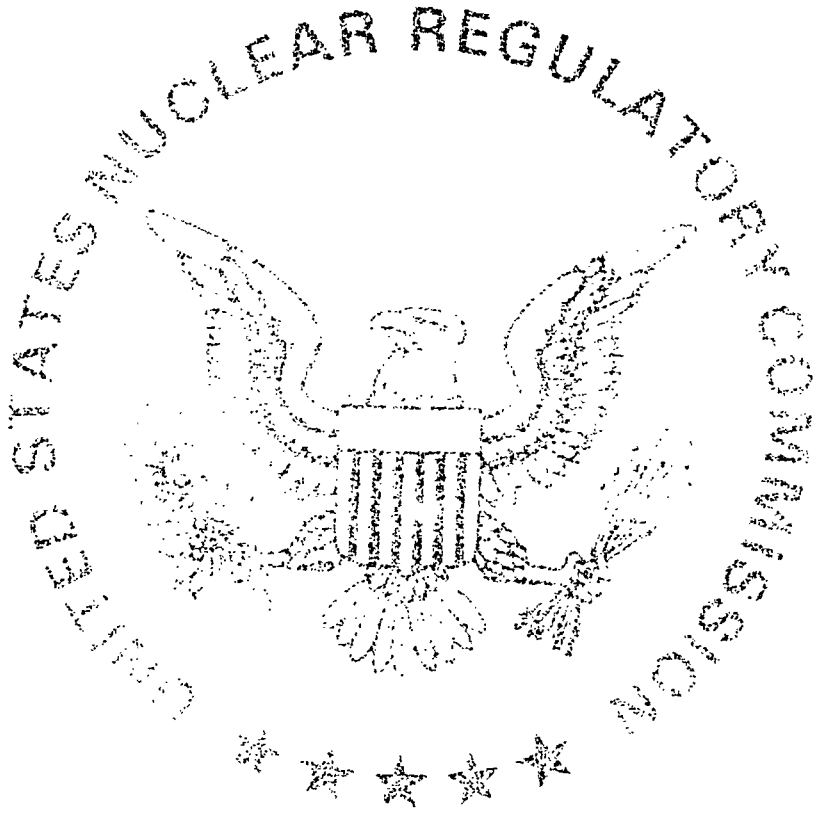
MATERIALS LICENSE
SUPPLEMENTARY SHEET

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, 1996

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.

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 license'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) exits, 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 UF_6 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.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 18, 1996

DOCKET: 70-36

LICENSEE: Combustion Engineering, Inc. (CE)
Hematite, Missouri

SUBJECT: SAFETY EVALUATION REPORT: APPLICATION DATED OCTOBER 23, 1996, REQUEST FOR INCREASE IN POSSESSION LIMIT

BACKGROUND

By application dated October 23, 1996, CE requested a license amendment 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.

DISCUSSION

CE indicates that the current possession limit for low enriched uranium occasionally causes an undue burden with respect to managing the special nuclear material inventory; thus, CE needs to increase the possession limit to eliminate this burden.

CE indicates that product throughput of the Hematite facility will not be changed as a result of the increased possession limit, because the throughput is limited by the physical capacity of the oxide conversion process. The majority of the increased quantity of SNM will be either in a sealed form or stored in the containing devices. The staff has determined that the radiological impact of the increased quantity of nuclear material in inventory would not be significant. The licensee's currently approved organization and nuclear safety procedures are adequate to protect the health and safety of the personnel. Increase will not result in onsite storage increase for waste or unprocessed uranium.

ENVIRONMENTAL REVIEW

Since an increase in the possession limit will not result in a plant throughput increase, there will be no increase in effluents released to the environment. The staff has determined that the present radiological and environmental protection and nuclear criticality safety programs are adequate to support the increase in material.

The staff has determined that the increase in the possession limit will not result in a change in process operations or equipment, and that the following conditions have been met:

1. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite,

2. There is no significant increase in individual or cumulative occupational radiation exposure,

3. There is no significant construction impact, and

4. There is no significant increase in the potential for or consequences from radiological accidents.

Accordingly, pursuant to 10 CFR 51.22(c)(11), neither an environmental assessment nor an environmental impact statement is warranted for this action.

CONCLUSION

Based on the above discussion, the staff concludes that the proposed amendment can be issued authorizing the increase of the possession limit without undue risk to the workers, public, or environment. Therefore, the staff recommends that the amendment be approved.

The Region III staff has no objection to this proposed action.

Principal Contributors
Sean Soong
Mary Adams
Kim Hardin