

9 pgs 70-36



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 12, 1998

Mr. Robert W. Sharkey, Director  
Regulatory Affairs  
Hematite Nuclear Fuel Manufacturing  
Combustion Engineering, Inc.  
3300 State Road P  
Hematite, Missouri 63047

SUBJECT: REVISIONS OF FUNDAMENTAL NUCLEAR MATERIAL CONTROL PLAN  
(TAC NO. L30980)

Dear Mr. Sharkey:

This refers to your submittal dated June 13, 1997, as modified by your subsequent letter and enclosure dated December 8, 1997, in which you resubmitted a revised Fundamental Nuclear Material Control (FNMC) Plan. Both Plan revisions were properly submitted pursuant to the provisions of 10 CFR Part 70.34. We have completed our review of the revised Plan, and have found it to be acceptable. Accordingly, pursuant to Part 70 to Title 10 of the Code of Federal Regulations, Materials License SNM-33 is hereby amended to incorporate your revised FNMC Plan. Thus, Safeguards License Condition SG-1.1 has been revised to include the revision of December 8, 1997, and to read as follows:

SG-1.1 The licensee shall follow Sections 1.0, 6.0, 7.0, and 9.0 with all pages dated April 28, 1995, and Sections 2.0, 3.0, 4.0, 5.0, and 8.0 with all pages dated December 8, 1997, of its Fundamental Nuclear Material Control Plan. This Plan may be further revised in accordance with, and pursuant to, the provisions of either 10 CFR Part 70.32(c) or 70.34.

All other conditions to this license shall remain the same.

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

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Mr. Robert W. Sharkey

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We agree with your determination that the enclosures to your letters contain information of the type specified in 10 CFR Part 2.790(d) which is deemed to be commercial or financial within the meaning of 10 CFR Part 9.17(a)(4). Accordingly, said enclosures will be held from public disclosure unless subject to the provisions of 10 CFR Part 9.23.

Sincerely,

Original signed by:

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

Docket 70-36  
License SNM-33  
Amendment 19

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

**DISTRIBUTION: w/o encl. (Control No. 660M) [COMPLETED]**

Docket 70-36	PUBLIC	NRC File Center	FCSS R/F
Region III	FCLB R/F	NMSS R/F	TReidinger, RIII
PMDA	MAdams	FCOB	

\*See previous concurrence

OFC	FCLB*	E	FCLB*	E	FCLB	FCLB	FCLB*	E	FCLB	E	FCLB	N
NAME	TPham		MAdams		PShea	SSoong	MGalloway		MWeber			
DATE	01/22/98		01/22/98		01/30/98	01/30/98	01/23/98		01/12/98			

Mr. Robert W. Sharkey

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We agree with your determination that the enclosures to your letters contain information of the type specified in 10 CFR Part 2.790(d) which is deemed to be commercial or financial within the meaning of 10 CFR Part 9.17(a)(4). Accordingly, said enclosures will be held from public disclosure unless subject to the provisions of 10 CFR Part 9.23.

Sincerely,



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

Docket 70-36  
License SNM-33  
Amendment 19

Enclosures: 1. Materials License SNM-33  
2. Safeguards 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 <b>SNM-33, Amendment 19</b>
2. 3300 State Road P Hematite, Missouri 63047		4. Expiration date <b>July 31, 2004</b>
		5. Docket or Reference No. <b>70-36</b>
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.		

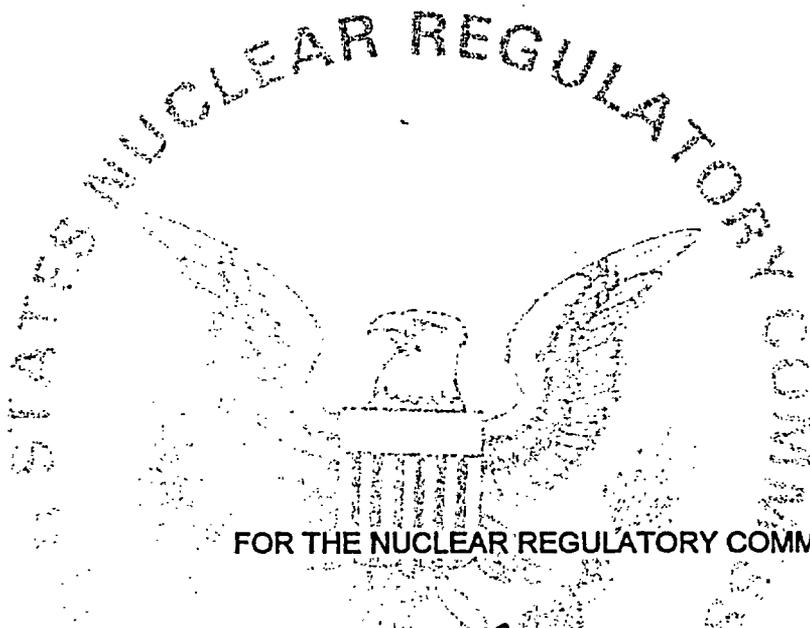
**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
SNM-33 Amendment 19

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: February 12, 1998

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 19

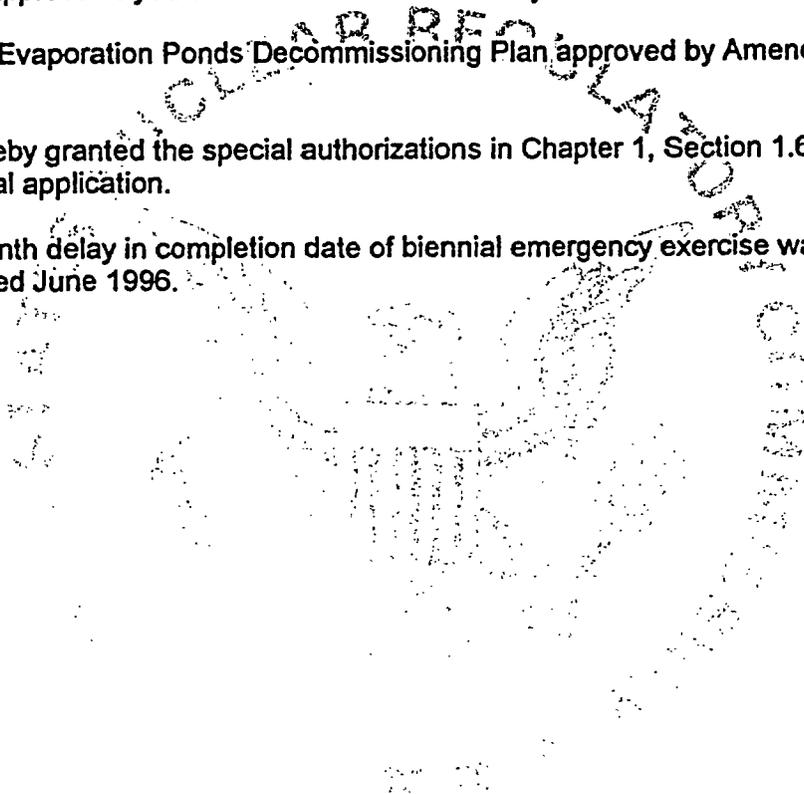
Docket or Reference Number

70-36

**SAFETY CONDITIONS**

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- 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; January 26, May 29, and October 23, 1996; May 30, August 8, August 11, October 22, and December 19, 1997.
- S-2. Deleted - Determination of the source of contamination and identification of the contaminants in burial site well # 4 approved by Amendment 18 dated January 1998.
- 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 19

Docket or Reference Number  
70-36

**SAFEGUARDS CONDITIONS**

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Section 1.0 - Material Control & Accounting

- SG-1.1 The licensee shall follow Sections 1.0, 6.0, 7.0, and 9.0 with all pages dated April 28, 1995, and Sections 2.0, 3.0, 4.0, 5.0, and 8.0 with all pages dated December 8, 1997, of its Fundamental Nuclear Material Control Plan. This Plan may be further revised in accordance with, and pursuant to, the provisions of either 10 CFR Part 70.32(c) or 70.34.
- SG-1.2 Deleted - This was deleted by Amendment 16 dated February 1997.
- SG-1.3 Deleted - This was deleted by Amendment 16 dated February 1997.
- SG-1.4 Deleted - This was deleted by Amendment 16 dated February 1997.
- SG-1.5 Deleted - This was deleted by Amendment 16 dated February 1997.
- SG-1.6 Deleted - This was deleted by Amendment 14 dated July 1996.
- SG-1.7 Notwithstanding the requirements of Condition SG-1.1, and in accordance with a letter dated October 10, 1996, the licensee is not required, per Section 4.3.1 of the Plan, to provide for "witnessed sampling" of the UF<sub>6</sub> cylinders received under work order GES 3102. As an alternate safeguards measure, the licensee will analyze two samples of UO<sub>2</sub>F<sub>2</sub> produced from each cylinder during its conversion process to confirm the vendor's measurement of U-235.

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<sub>6</sub> 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

February 12, 1998

DOCKET: 70-36

LICENSEE: Combustion Engineering Inc.  
Hematite, Missouri

SUBJECT: SAFEGUARDS EVALUATION REPORT: SUBMITTALS DATED JUNE 13,  
1997, AND DECEMBER 8, 1997 - REVISIONS TO FUNDAMENTAL NUCLEAR  
MATERIAL CONTROL PLAN

BACKGROUND

By a letter dated June 13, 1997, Combustion Engineering (CE) submitted revised Sections 3.0 and 4.0 of its Fundamental Nuclear Material Control (FNMC) Plan. The revision of the Plan was made to address organizational changes and proposed practices in item control audit and UF<sub>6</sub> sampling and receipt measurement. Following review of the submitted revision and discussion during a licensing visit at the facility, and via a letter dated November 6, 1997, the Material Control and Accounting (MC&A) licensing staff requested CE to make various clarifications and changes to said Plan revision. By cover letter dated December 8, 1997, CE resubmitted revisions to five sections in their entirety: Sections 2.0, 3.0, 4.0, 5.0, and 8.0 of its Plan, which provided all modifications requested by the NRC letter. Both amendment submittals were processed pursuant to the provisions of 10 CFR 70.34.

DISCUSSION

CE provided various changes to its FNMC Plan to update the organizational structure and responsibilities, to close an outstanding inspector follow-up item concerning item control auditing, and to revise the description of UF<sub>6</sub> sampling and receipt measurement.

NUREG-1065 (Revision 2, December 1995), "Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Facilities," was used as the basis for reviewing both the initial June 13, 1997, and the revised December 8, 1997, FNMC Plan submittals for acceptability. NUREG-1065 is a document that provides (1) clarification of regulatory intent and scope, (2) guidance to licensees and applicants relative to topics to be addressed in FNMC Plan submittals, and (3) NRC acceptance criteria to be utilized in evaluating an FNMC Plan. Review of the initial Plan submittal generated comments/questions which were transmitted to the licensee via a November 6, 1997, letter. This proprietary letter specifically delineated the deficiencies in the initial Plan submittal. In the subsequent Plan revision of December 8, 1997, CE fully addressed all issues in a satisfactory manner.

ENVIRONMENTAL REVIEW

The staff has determined that the proposed activities involve safeguards plans and material accountability, which are categorically excluded from the requirements to prepare a site-specific

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environmental assessment. Therefore, in accordance with 10 CFR 51.22(c)(12), neither an environmental assessment nor an environmental impact statement is warranted for this action.

### CONCLUSION

The staff concludes that the licensee's MC&A program for possessing and using nuclear materials as described in the December 8, 1997, revision of the FNMC Plan will achieve the performance objectives and system capabilities required by 10 CFR 74.31 regulations. Therefore, Safeguards Condition SG-1.1 has been revised to incorporate the revised FNMC Plan.

The Operations Branch (FCOB) inspection staff has no objection to this proposed action.

### Principal Contributor

Thomas N. Pham

*Michael S. Weber*  
*February 12, 1998*