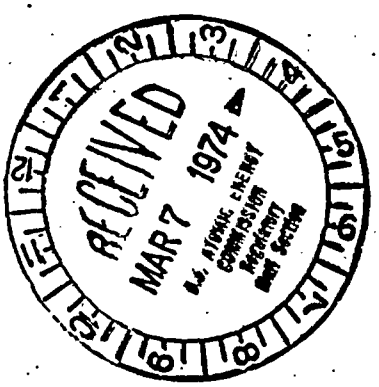
COMBUSTION DIVISION, COMBUSTION ENGINEERING, INC.
WINDSOR, CONN. 06095
203-688-1911 CABLE: COMBENG

application for use of Hematite, Mo. facility.

COMBUSTION DIVISION



March 4, 1974

R

Mr. Leland C. Rouse
Fuel Fabrication & Reprocessing
Directorate of Licensing
Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Rouse:

Combustion Engineering, Inc., hereby requests issuance of an SNM License to operate the Hematite Facility previously licensed under SNM-33. The operations will be limited to uranium having a maximum enrichment of 4.1 w/o U-235. All uranium having higher enrichments will be removed from the site, and all facilities not used for processing the low enrichment uranium will have been cleaned and released in accordance with "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for By-product, Source, or Special Nuclear Material", dated April 22, 1970. We plan to commence operations on May 1, 1974.

All operations and controls shall follow from the specific pages of SNM-33 listed in the attachment to this letter. Audits will be as specified, with the bi-monthly audit performed by Mr. T. Gutman of NPM-W. In addition, an annual audit will be performed by a committee consisting of Mr. T. Gutman, an independent Health Physicist, and an independent individual knowledgeable in criticality control.

It is the intent of C-E to operate the facility in a manner which results in the lowest practical effluent discharge levels. Accordingly, an engineering program will be undertaken to consolidate and monitor all discharge stacks. This will be done in two phases. Phase (1) will entail installation of fixed monitors for all stacks from which radioactive effluents are emitted. These monitors will be installed by May 5, 1974, and samples will be changed and counted at least once each day. Phase (2) will consist of developing engineering plans for the consolidation of ventilation discharge stacks to provide a minimum number of stacks, each of which will be filtered (99.97% at 0.3 micron). The plans for this work will be finalized and line drawings of the proposed ventilation systems submitted to your office by March 22, 1974. Completion of installation is anticipated on or before February 1975.

G-80 / 0515

As part of this work, furnaces 240-3-12 and 240-3-13 will be provided filtered ventilation, as will all other operations in the Green Room. It is our intent to operate all non-aqueous operations in the Green Room after installation of ventilation is complete, however, no aqueous operations will be performed pending specific approval of a geometrically safe system.

We request authorization to possess 200,000 kg uranium at a maximum enrichment of 4.1 w/o U-235, and 20,000 kg normal or depleted uranium. It is our intent to submit a completely consolidated license by July 1, 1975.

Very truly yours,

H. V. Lichtenberger
Vice President-Manufacturing
Nuclear Power Systems

HVL:TG:sb
Attachments.

Attachment to Combustion Engineering, Inc. letter dated March 4, 1974

Section	Subsection	Subpart	Sheet	of	Date
100		T of C			10/31/68
100	101		1	1	10/31/68
100	102		1	1	10/31/68
100	103		1	1	2/6/70
200		T of C	1	1	10/31/68
200	203		1	1	2/6/70
200	205		1	1	2/6/70
200	206		1	1	2/6/70
200	207		1	2	2/6/70
200	207		2	2	2/6/70
200	208		1	1	10/31/68
300		T of C	1	1	10/31/68
300	301		1	1	10/31/68
300	302		1	1	2/6/68
300	303		1	3	4/21/72
300	303		2	3	4/21/72
300	303		3	3	4/21/72
300	303	303.2.2.4	1	1	2/6/70
300	303	303.2.2.3	1	5	2/6/70
"	"	" " " "	2	5	"
"	"	" "	3	5	"
"	"	" "	4	5	"
"	"	" "	5	5	"
300	303		1	6	2/6/70
"	"		2	6	"
"	"		3	6	"
"	"		4	6	"
"	"		5	6	"
"	"		6	6	"
300	304		1	1	10/31/68
300	305		1	2	2/6/70
300	305		2	2	10/25/68
300	306		1	2	2/6/70
300	306		2	2	2/6/70
300	307		1	1	2/6/70
300	308		1	1	10/31/68
300	309		1	1	2/6/70
300	309	Table 309-1	1	1	2/6/70
300	309	Fig. 309-XII	1	1	"
"	"	" 309-XIII	1	1	"
"	"	" 309-XIV	1	1	"
"	"	" 309-XXV	1	1	"
"	"	" 309-XVI	1	1	"
"	"	" 309-XVII	1	1	"
"	"	" 309-XVIII	1	1	"
"	"	" 309-XIX	1	1	"
"	"	" 309-XX	1	1	4/21/72
"	"	" 309-XXI	1	1	"
"	"	" 309-XXII	1	1	2/6/70
"	"	" 309-XXIII	1	1	2/6/70
"	"	" 309-XXIV	1	2	"
"	"	" 309-XXIV	2	2	4/21/72

Section	Subsection	Subpart	Sheet of		Date
300	309	Fig. 309-XXIV	1	4	2/6/70
"	"	" 309-XXIV	2	4	"
"	"	" 309-XXIV	3	4	"
"	"	" 309-XXIV	4	4	"
300	309	Table 1			NA
300	309	Figure 1			NA
400		T of C			
400	401		1	2	10/31/68
"	401		2	2	"
"	402		1	2	"
"	402		2	2	"
"	403		1	2	"
"	403		2	2	"
400	403	Table 403-1	1	2	"
400	403	" " "	2	2	"
400	404		1	2	"
400	404		2	2	"
"	405		1	3	"
"	"		2	3	"
"	"		3	3	"
400	405.1		1	1	"
400	406		1	2	"
400	406		2	2	"
500					2/6/70
600		T of C			10/31/68
600	601		1	1	"
"	602		1	1	"
"	603		1	5	2/6/70
"	603		2	5	10/31/70
"	"		3	5	"
"	"		4	5	"
"	"		5	5	"
600	604		1	3	"
"	"		2	3	"
"	"		3	3	10/31/70
600	605		1	1	10/31/68
"	606		1	1	"
"	607		1	1	"
"	608		1	2	"
"	608		1	2	"
700		T of C			
700	701		1	1	2/6/70
"	702		1	2	10/31/68
"	702		2	2	"
"	703		1	1	"
"	704		1	1	"
800	810	T of C	1	1	7/20/71
800	810	811.1	1	1	2/6/70
"	"	Sketch 811.1-1	1	1	10/31/68
800	"	Sketch 811.1-II	1	1	"
"	"	" 812.2	1	1	10/31/68
"	810	812.6	1	1	2/6/70
"	"	812.6	1	12	2/6/70

Section	Subsection	Subpart	Sheet	of	Date
800	810	812.6	2	12	2/6/70
"	"	"	3	12	"
"	"	"	4	12	"
"	"	"	5	12	"
"	"	"	6	12	"
"	"	"	7	12	"
"	"	"	8	12	"
"	"	"	9	12	"
"	"	"	10	12	"
"	"	"	11	12	"
"	"	"	12	12	"
800	810	813&813.4	1	1	10/31/68
800	810	Table 813.4-I	1	1	"
"	"	" 813.4-II	1	1	"
"	"	" 813.4-III	1	1	"
"	"	813.5	1	1	"
"	"	Sketch 813.5-I	1	1	"
"	"	" 813.5-II	1	1	"
800	820	T of C	1	1	"
"	"	821	1	1	2/6/70
"	"	823 T of C	1	1	10/31/70
"	"	823	1	1	10/31/68
"	"	823.1&2	1	1	3/5/71
"	"	823.3			
"	"	"	2	6	2/6/70
"	"	"	3	6	10/31/68
"	"	"	4	6	"
"	"	"	5	6	"
"	"	"	6	6	"
"	"	823.4	1	4	3/5/71
"	"	"	2	4	6/16/71
"	"	"	3	4	3/5/71
"	"	"	4	4	3/5/71
"	"	823.3	1	1	10/31/68
"	"	"	1	1	"
"	"	"	1	1	"
"	"	823.4	1	9	"
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"	"	"	4	9	"
"	"	"	5	9	"
"	"	"	6	9	"
"	"	"	7	9	"
"	"	"	8	9	"
"	"	"	9	9	"
800	820	825	1	1	10/31/68
"	"	825.1	1	1	2/19/71
"	"	"	1	1	10/31/68
"	"	825.2&3	1	1	"
"	"	825.4	1	14	4/24/70
"	"	"	2	14	"
"	"	"	2a	14	"
"	"	"	3	14	2/6/70
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"	"	"	5	14	2/19/71
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"	"	"	7	14	4/16/71

Section	Subsection	Subpart	Sheet	of	Date
800	820	825.4	8	14	2/19/71
"	"	"	9	14	"
"	"	"	10	14	10/31/68
"	"	"	11	14	2/6/70
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"	"	"	14	14	2/19/71
800	820	825.4	1	1	4/24/70
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"	"	"	1	1	10/31/68
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"	"	"	1	1	"
"	"	"	1	1	4/16/71
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"	"	"	1	1	2/19/71
800	820	825.4.2.2	1	7	2/19/71
"	"	"	2	7	4/16/71
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"	"	"	4	7	2/6/70
"	"	"	5	7	4/24/70
"	"	"	6	7	4/24/70
"	"	"	7	7	4/24/70
"	"	"	1	1	2/6/70
800	820	825.4.2.3	1	6	2/19/71
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"	"	"	3	6	"
"	"	"	4	6	"
"	"	"	5	6	"
"	"	"	6	6	4/16/71
800	820	825.4.2.6	1	6	2/19/71
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"	"	"	3	6	4/24/70
"	"	"	4	6	"
"	"	"	5	6	"
"	"	"	6	6	2/19/71
800	820	825.4.2.7	1	7	2/19/71
"	"	"	2	7	"
"	"	"	3	7	"
"	"	"	4	7	2/6/70
"	"	"	5	7	4/24/70
"	"	"	6	7	4/24/70
"	"	"	7	7	2/19/71
"	"	825.4.2.8	1	6	2/19/71
"	"	"	2	6	"
"	"	"	3	6	"
"	"	"	4	6	"

Section	Subsection	Subpart	Sheet	of	Date
800	820	825.4.2.8	5	6	2/19/71
"	"	"	6	6	"
"	"	825.4	1	1	10/31/68
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"	"	"	1	5	"
"	"	"	2	5	"
"	"	"	3	5	"
"	"	"	4	5	"
"	"	"	5	5	2/19/71
800	820	825.4	1	4	2/19/71
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"	"	"	3	4	"
"	"	"	4	4	"
800	820	825-A	1	1	10/31/68
800	820	825-B	1	6	"
"	"	"	2	6	"
"	"	"	3	6	"
"	"	"	4	6	"
"	"	"	5	6	"
"	"	"	6	6	"
800	820	825-C	1	2	10/31/68
"	"	"	2	2	"
800	820	825-D	1	2	2/19/71
"	"	"	2	2	4/24/70
800	820	825-F	1	4	10/31/68
"	"	"	2	4	"
"	"	"	3	4	"
"	"	"	4	4	"
800	820	"	1	1	4/24/70
800	820	826	1	3	2/6/70
800	820	Fig. 826.1	1	1	2/6/70
800	820	826.3	2	3	10/31/68
"	"	826.4	2	3	"
"	"	826.4	3	3	2/6/70
"	"	Fig. 826.3	1	1	"
"	"	Fig. 826.5	1	1	"
"	"	826.4	1	2	"
"	"	826.4	2	2	"
"	"	Fig. 826.1	1	1	10/31/68
"	"	Sketch 826.4-I	1	1	2/6/70
"	"	826.4.1	1	2	10/31/68
"	"	826.4.1	2	2	"
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"	"	831	2	2	"
"	"	832	1	1	"
"	"	840	1	1	"
"	"	840	1	3	"

Section	Subsection	Subpart	Sheet	of	Date
800	820	840	2	3	10/31/68
"	"	"	3	3	"
800	820	Fig. 840.1	1	1	

Appendix NEDO - 1050

Appendix "Operational Controls for the Low Enriched Dry Powder Processes"

4/16/71

Drawing		Date
67004-439		11/8/68
67004-441		11/12/68
67004-440		11/11/68
D-5007-2001	Sheets 1-9	7/8/70
B-5007-2008		4/12/70
B-5008-8199		4/17/70
48-401		5/23/68
3712-201		11/8/68