



U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
WASHINGTON, D.C. 20234

APR 6 1966

IN REPLY REFER TO: 314.02

* Dr. Richard L. Doan, Director
Division of Reactor Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

RE: Docket #50-184

File Copy (suppl.)

Gentlemen:

The National Bureau of Standards respectfully submits an amendment to the application for a provisional construction permit and facility operating license covering the construction and operation of a 10 megawatt (thermal), heavy water moderated and cooled, tank-type nuclear research reactor near Gaithersburg, Maryland. NBS combines its application as permitted by Section 50.31 of Title 10 CFR Part 50 for (1) a Class 104(c) facility license, (2) a special nuclear materials license, and (3) a by-product materials license.

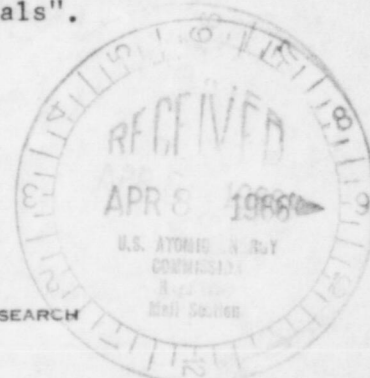
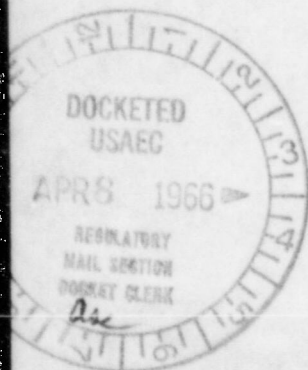
See Rpts. File
Pursuant to the Atomic Energy Act of 1954, as amended, and Title 10 CFR Part 50, Section 50.56, NBS herein applies for conversion of the provisional construction permit number CPTR-5, as revised, to a facility operating license per paragraph "F" of the provisional construction permit. In support of this request, NBS presents the "Final Safeguards Analysis for the NBSR", transmitted under separate cover. It is requested that this license be granted for a term of fifteen (15) years from the date of the provisional construction permit issuance.

NBS herein applies for a special nuclear materials license under Title 10 CFR Part 70, Section 70.31. NBS requests that it be permitted to receive, possess, utilize, and transfer special nuclear materials in the operation of the reactor. It is requested that the expiration of this license coincide with the termination of the facility license requested above. Included with this request is a revised "Schedule of Transfers of Special Nuclear Materials".

B609150043 661221
PDR ADOCK 05000184
A PDR

ACKNOWLEDGED

NBS INSTITUTES FOR SCIENCE AND TECHNOLOGY
INSTITUTE FOR BASIC STANDARDS INSTITUTE FOR MATERIALS RESEARCH
INSTITUTE FOR APPLIED TECHNOLOGY

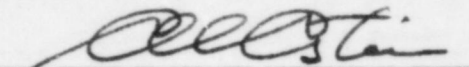


1009

NBS applies for a license under Title 10 CFR Part 30, Section 30.32, to possess such by-product material as may be produced from operation of the reactor. It is requested that the expiration of this license coincide with the termination of the facility license requested above.

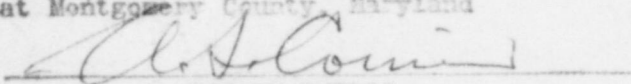
For the National Bureau of Standards

By:



Dr. A. V. Astin,
Director

Subscribed and sworn to before me
this 7th day of April, A.D. 1966
at Montgomery County, Maryland



NOTARY PUBLIC

My Commission expires July 1, 1967

File Copy (suppl.)

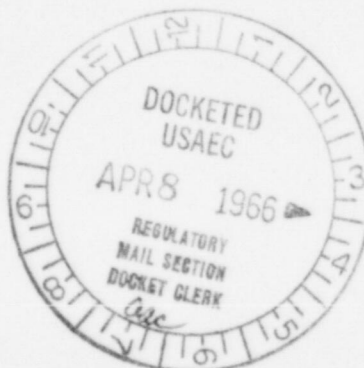
ESTIMATED SCHEDULE OF TRANSFERS OF SPECIAL NUCLEAR MATERIAL FROM THE COMMISSIONTO THE NATIONAL BUREAU OF STANDARDS AND TO THE COMMISSION FROM THENATIONAL BUREAU OF STANDARDS

(1)	(2)	(3)		(4)	(5)
Date of Transfer (Fiscal Year)	Transfers AEC to NBS Kg U-235 Cold	Transfers NBS to AEC Kg U-235 Cold Hot		Net Yearly Dis- tribution Incl. Cum. Losses Kg U-235	Cumulative Dis- tribution Incl. Cum. Losses Kg U-235
1966	4.08	--	--	4.08	4.08
1967	13.49	1.03	--	12.46	16.54
1968	15.54	2.94	7.70	4.90	21.44
1969	15.54	2.94	8.36	4.24	25.68
1970	15.54	2.94	8.36	4.24	29.92
1971	15.54	2.94	8.36	4.24	34.16
1972	15.54	2.94	8.36	4.24	38.40
1973	15.54	2.94	8.36	4.24	42.64
1974	15.54	2.94	8.36	4.24	46.88
1975	15.54	2.94	8.36	4.24	51.12
1976	15.54	2.94	8.36	4.24	55.36
1977	15.54	2.94	10.93	1.67	57.03
1978	1.97	0.31	11.12	(9.46)**	47.57*
	174.94	30.74	96.63	47.57*	

* Fabrication and Burnup Losses

** Inventory to be Returned

Revised March 11, 1966



FROM: U. S. Department of Commerce National Bureau of Standards Washington, D. C. (A. V. Astin)		DATE OF DOCUMENT: 4-6-66	DATE RECEIVED: 4-8-66	NO.: 1009
TO: Dr. Doan		LTR. x (NOTARIZED 4-7-66)	MEMO:	REPORT:
CLASSIF.: U		ORIG.:	CC:	OTHER:
POST OFFICE		3 signed & 19 conformed cys. rec'd 18 cys. ltr.		
REG. NO.		ACTION NECESSARY ☐ CONCURRENCE ☐ DATE ANSWERED: reprod.		
DESCRIPTION: (Must Be Unclassified)		NO ACTION NECESSARY ☐ COMMENT ☐ BY: in file room		
Ltr. (314.02) hereby making application for (1) a Class 104(c) facility license, (2) a smm license and (3) a by-product materials license.....and trans:		FILE CODE: DOCKET: 50-184		
ENCLOSURES: (40 cys. of rpt. & 22 of schedule rec'd)		REFERRED TO DATE RECEIVED BY DATE		
NBSR-9 - "Final Safety Analysis Report on the NBS Reactor," which includes a map of Montgomery County, Maryland....		Levine: 4-11 w/all extras (21)--FOR ACTION		
"Estimated Schedule of Transfer of SNM...."		Dr. Doan: 4-11 w/info cy.		
REMARKS: Mail Room Distribution: 1-formal file cy. 1-suppl. file cy. 1-AEC PDR 1-OGC 2-compliance 1-N. Stoner (Holding 8 sets for Hearing)		Huard: 4-11 w/info cy. Skovholt: 4-11 w/info cy. H. Price: 4-11 w/info cy.		
		DO NOT REMOVE		
		ACKNOWLEDGED		

U. S. ATOMIC ENERGY COMMISSION MAIL CONTROL FORM FORM AEC-3265 (8-60)

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		ACTION		
		ACKNOWLEDGED		

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