



UNITED STATES
ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

MAR 24 1972

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(26214)

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50-306

Northern States Power Company
ATTN: Mr. F. P. Tierney, Jr.
Plant Superintendent
Prairie Island Nuclear Generating Plant
Route 2
Welch, Minnesota 55089

Gentlemen:

Enclosed is Byproduct Material License Number 22-08799-05.

Please note that this license does not include the sealed source containing 20 curies of cesium 137 nor the one curie of krypton 85 requested in your application dated February 2, 1972. In order to consider amending this license to cover these byproduct materials, we need the following:

1. More detailed description of the activities involving the cesium 137 source including:
 - a. Description of the area or room in which the source will be used;
 - b. Evaluation of external radiation in unrestricted areas when the source is being used;
 - c. Description of procedures for setting up instruments, activating calibrator, and reading instruments; and
 - d. Provisions for controlling access to area or room when source is being used.
2. Specify the manufacturer and the model number of the cesium source. If the source has not had a safety evaluation performed, either by the Commission or an Agreement State, such an evaluation must be performed prior to licensing use of the source. The type of information needed to perform such an evaluation is outlined in Enclosure 1 to this letter. Also, our records do not indicate that the International Chemical and Nuclear Corporation Model Number CCSD-20e calibrator has had a safety evaluation performed either

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by the Commission or an Agreement State. The type of information needed to perform such an evaluation is outlined in Enclosure 2 to this letter.

3. More detailed description of the activities involving the one curie of krypton 85 including:
 - a. Description of activities to be performed;
 - b. Safety evaluation of potential or planned releases to unrestricted areas; and
 - c. Radiation safety program including contamination control, surveys, instructions given to persons performing the activities, etc.

Sincerely,

Original signed by
Robert E. Brinkman

Robert E. Brinkman
Materials Branch
Division of Materials Licensing

Enclosures:

1. Guide - Information to be Submitted Concerning Sealed Sources Containing Radioactive Materials
2. Guide - Information to be Submitted Concerning Devices Utilizing Radioactive Materials

Distribution:

Std. Br. Dist.

DML

CO: Region III

DRL-Docket 50-282 &
50-306

CRESS: #01 of PEE	DML	DML:MB	DML:MB		
MC #543-547 & 543-549	RL Layfield/pf	RE Brinkman	JC Malaro		
3/1/72 DATE	3/2/72	3/2/72	3/2/72		

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 32, 33, 34, and 35, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below; and to use such byproduct material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Northern States Power Company	3. License number 22-08799-03
2. 614 Nicollet Mall Minneapolis, Minnesota 55401	4. Expiration date See Condition 13.
	5. Reference No.

6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioac- tivity which licensee may possess at any one time
A. Cesium 137	A. Sealed source	A. 10.5 millicuries
B. Cobalt 60	B. Sealed source	B. 100 millicuries
C. Strontium 90	C. Sealed source	C. 0.016 millicurie
D. Any byproduct material with Atomic Nos. 3 through 83, inclusive	D. Any	D. Maximum quantity per isotope = 100 microcuries

9. Authorized use
A. through D. instrument calibration and counting room standards.

CONDITIONS

- 10. Byproduct material shall be used only at Prairie Island Nuclear Generating Plant, Goodhue County, Minnesota.**
- 11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 20, "Standards for Protection Against Radiation."**
- 12. Byproduct material shall be used by, or under the supervision of, J. A. Brokaw, T. E. McFadden, H. D. Foylio, or E. L. Vatal.**
- 13. This license shall expire February 28, 1973, or upon conversion of Construction Permit Nos. CPH-45 and CPH-46 to operating licenses, whichever is earlier.**

BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

License Number 22-08799-05

(continued)

CONDITIONS

14.A.(1) Each sealed source containing byproduct material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, the sealed source shall not be put into use until tested.

(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

(3) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored or which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the test with the Director, Division of Materials Licensing, U. S. Atomic Energy Commission, Washington, D. C. 20545, describing the equipment involved, the test results, and the corrective action taken. A copy of such report shall also be sent to the Director, Region III, Division of Compliance, USAEC, 799 Roosevelt Road, Glen Ellyn, Illinois 60137.

14. continued

D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an agreement State to perform such services.

15. Except as specifically provided otherwise by this license, the licensee shall possess and use byproduct material described in items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in the licensee's application dated February 2, 1972.

For the U. S. Atomic Energy Commission

Original Signed by
 Robert E. Brinkman

by _____
 Division of Materials Licensing
 Washington, D. C. 20545

Date MAR 24 1972