

FILE COPY

1518 Chestnut Avenue North  
Minneapolis, Minnesota 55403-1232

October 29, 2003

A  
030-08255Materials Licensing Branch  
U.S. Nuclear Regulatory Commission, Region III  
801 Warrenville RD  
Lisle, IL 60532-4351Re: Request to amend Materials License No. 22-08799-04 for Northern States  
Power Company

Dear Materials Licensing Branch:

Northern States Power Company hereby requests that Materials License No. 22-08799-04 be amended as indicated in Attachment 1.

In support of this request, the following additional documents are provided:

- 1) Completed and signed NRC Form 313, Application for Material License (attachment 2)
- 2) Résumé of training and experience for the proposed new RSO, Lori Gleason (attachment 3)
- 3) Leak test certifications and waste disposal documentation for four Ni-63 gas chromatograph sources that were decommissioned on August 22, 2002, by NRD, LLC (attachment 4)

If there are any questions regarding this amendment request, please contact Lori Gleason at 612-630-4441.

Sincerely

Mark Freeman  
Vice President, Technical Services

4 Attachments

cc/att: Lori Gleason, Chemistry Resources  
Environmental Services Record Center313400  
REC'D JUN 04 2004

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

PAGE 1 OF 3 PAGES  
Amendment No. 08

## 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, 36, 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		In accordance with the application dated January 27, 1998	
1. Northern States Power Company <i>d/b/a Xcel Energy</i>		3. License number 22-08799-04 is renewed in its entirety to read as follows:	
2. 414 Nicotlet Mall <i>1518 Chestnut Ave</i> Minneapolis, MN <i>55401-1927</i> <i>55403</i>		4. Expiration date July 31, 2008	
		5. Docket No. 030-030-08255 Reference No.	
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. <u>Nickel-63</u>	A. <u>Foil source (contained in Perkin-Elmer Model No. L4130128 detector cell)</u>	A. <u>No single source to exceed 15 millicuries</u>	
A. <del>B.</del> Nickel-63	B. <del>Foil source (contained in Perkin-Elmer Model No. N610-0063 detector cell)</del>	A. <del>B.</del> <u>No single source to exceed 15 millicuries</u>	
B. <del>A.</del> Nickel-63	C. <u>Foil source (contained in Hewlett-Packard Model No. G2397A detector cell)</u>	B. <del>A.</del> <u>No single source to exceed 15 millicuries</u>	
9. Authorized use			
A. <del>To be used in a Perkin-Elmer Model No. 84-10 gas chromatograph for sample analysis.</del>			
A. <del>B.</del> To be used in a Perkin-Elmer Autosystem XL gas chromatograph for sample analysis.			
B. <del>A.</del> To be used in a Hewlett-Packard Model No. 6890 gas chromatograph for sample analysis.			

## CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 1518 Chestnut Avenue ~~North~~, Minneapolis, Minnesota.

NRC FORM 374A

U.S. NUCLEAR REGULATORY COMMISSION

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
22-08799-04Docket or Reference Number  
030-030-08255

Amendment No. 08

11. A. Licensed material shall be used by, or under the supervision of ~~E. E. Kranz~~, R. M. Riesgraf, or L. A. Gleason.
- B. The Radiation Safety Officer for this license is ~~E. E. Kranz~~ *Lori Gleason*
12. Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.
13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- C. Sealed sources need not be leak tested if:
- (i) they contain only hydrogen-3; or
  - (ii) they contain only a radioactive gas; or
  - (iii) the half-life of the isotope is 30 days or less; or
  - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
  - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, IL 60532, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
- E. The licensee is authorized to collect leak test samples for analysis by ~~TN Technologies~~ *TN Technologies*. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

NRC FORM 374A

U.S. NUCLEAR REGULATORY COMMISSION

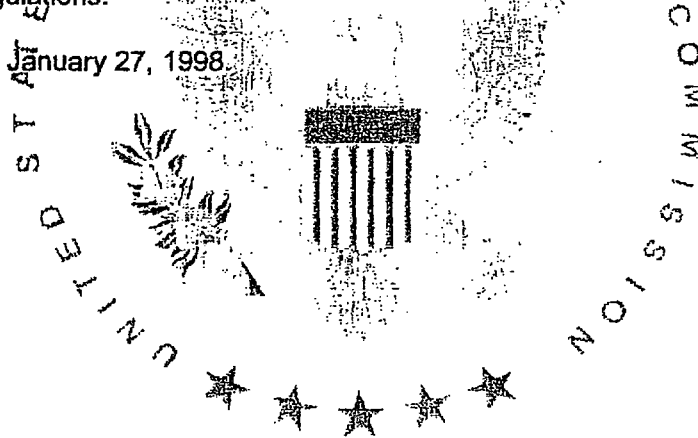
PAGE 3 of 3 PAGES

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
22-08799-04Docket or Reference Number  
030-030-08255

Amendment No. 08

14. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the Commission or an Agreement State to perform such services.
15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
16. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
17. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application dated January 27, 1998



JUL 27 1998

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date \_\_\_\_\_

By \_\_\_\_\_

*Michael F. Weber*  
Michael F. Weber  
Materials Licensing Branch  
Region III

## ATTACHMENT 2

<b>NRC FORM 313</b> (10-2002) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	APPROVED BY OMB: NO. 3150-0120  Estimated burden per response to comply with this mandatory collection request: 7 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:infocollect@nrc.gov">infocollect@nrc.gov</a> , a link to the Desk Officer, Office of Information and Regulatory Affairs, NE08-102-2, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information.	EXPIRES: 10/31/21 05						
<h2 style="margin: 0;">APPLICATION FOR MATERIAL LICENSE</h2>									
<b>INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.</b>									
<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b>  DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001  <b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b>  <b>IF YOU ARE LOCATED IN:</b>  CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:  LICENSING ASSISTANT SECTION NUCLEAR MATERIALS SAFETY BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION I 475 ALLENDALE ROAD  ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:  SAM NUNN ATLANTA FEDERAL CENTER U. S. NUCLEAR REGULATORY COMMISSION, REGION II 81 FORSYTH STREET, S.W., SUITE 23T85 ATLANTA, GEORGIA 30303-8931		<b>IF YOU ARE LOCATED IN:</b>  ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:  MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 801 WARRENVILLE RD. Lisle, IL 60532-4351  ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:  NUCLEAR MATERIALS LICENSING SECTION U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 811 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 76011-8064							
<b>PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.</b>									
1. THIS IS AN APPLICATION FOR (Check appropriate item)  <input type="checkbox"/> A. NEW LICENSE <input checked="" type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <u>22-08799-04</u> <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____		2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)  Northern States Power Company d/b/a Xcel Energy 1518 Chestnut Ave. Minneapolis, MN 55403							
3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED  1518 Chestnut Ave. Minneapolis, MN 55403		4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION  Lori Gleason  TELEPHONE NUMBER 612-630-4441							
SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.									
5. RADIOACTIVE MATERIAL a. Element and mass number; b. chemical and/or physical form; and c. maximum		6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.							
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.		8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.							
9. FACILITIES AND EQUIPMENT.		10. RADIATION SAFETY PROGRAM.							
11. WASTE MANAGEMENT.		12. LICENSE FEES (See 10 CFR 170 and Section 170.31) <table style="width:100%; border: none;"> <tr> <td style="border: none;">FEE</td> <td style="border: none; text-align: right;">AMOUNT</td> <td style="border: none; text-align: right;">\$</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none; text-align: right;">ENCLOSED</td> <td style="border: none;"></td> </tr> </table>		FEE	AMOUNT	\$		ENCLOSED	
FEE	AMOUNT	\$							
	ENCLOSED								
13. CERTIFICATION. (Must be completed by applicant); THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON  THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND  WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO									
CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE <u>Mark A. Freeman V.P. Technical Services</u>		SIGNATURE 	DATE <u>10-1-03</u>						
<b>FOR NRC USE ONLY</b>									
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS				
APPROVED BY		DATE							

ATTACHMENT 3



1518 Chestnut Avenue North  
Minneapolis, Minnesota 55403-1292

October 29, 2003

Radiation Safety Training History:

Name: Lori A. Gleason

Employee ID: GLSL01

(612) 630-4441

[lori.a.gleason@xcelenergy.com](mailto:lori.a.gleason@xcelenergy.com)

Ms. Gleason graduated from the University of Wisconsin – River Falls in 1983 with a BS in Chemistry (ACS Approved). Since 1983 she has been employed by Northern States Power Company and Northern States Power Company d/b/a/ Xcel Energy, as a Laboratory Technician, Chemist, Senior Chemist and Systems Chemist.

Ms. Gleason has completed the following training courses:

"Radiation Safety Training" presented by TN Technologies, 24 hours, October 2000.

"Basic Safety and Operator Certification" presented by Scitec Corporation, 3 hours, November 1994.

Qualified at Level III nuclear tester. Attended "In-place Testing of Nuclear Air Cleaning Systems" course at Duke Power Company, 40 hours, 1985.

Ms. Gleason currently serves as the Assistant Radiation Safety Officer. She attends the necessary annual radiation protection training needed to perform work at the Prairie Island and Monticello Nuclear Generating Plants. She has performed instrument wipe surveys, inventoried radioactive sources and assisted with audits within the laboratory for 15 years.

## ATTACHMENT 4

FILE COPY



NRD, LLC 800-525-8076  
2937 ALT BOULEVARD 716-773-7634  
PO BOX 310 716-773-7744 FAX  
GRAND ISLAND, NY www.nrdinc.com  
14072-0310 Sales@nrdinc.com

Date: 8/22/02

To whom it may concern:

We are in receipt of:

Device & Model: PERKIN ELMER ELECTRON CAPTURE CELL  
Serial #: 3702, 3948, 1902 & 2422  
Isotope: Ni63  
Content: 60 MILLICURIES TOTAL ACTIVITY  
Date of Manufacture: UNKNOWN

Returned to NRD for:

Special Modification :  
Wipe Test :  
Repair, renovation  
and return :  
Waste Disposal : X  
(Service performed under NYS Licence 1391-1811)

Returned by:

Firm Name: XCEL ENERGY  
Address: 1518 CHESTNUT AVE.  
MINNEAPOLIS MN 55403  
ATTN: LORI GLEASON

Condition of Material Received:

Good : X Other :  
Complete: X Incomplete :

Very truly yours,  
Gary Gotsch  
Safety Officer

# Thermo MeasureTech

TN Technologies + Kay Ray + Sensall

2555 North IH-35  
Round Rock, TX 78664

(512) 388-9100  
(800) 735-0801  
Fax: (512) 388-9200  
www.thermoasuretech.com

## LEAK TEST CERTIFICATION

This is to certify that the product identified below was tested for removable contamination in accordance with Texas Radioactive Material License Number L03524, Condition 19 (Expiration: 12-31-2003).

Customer: 456500  
X-CEL ENERGY  
Special Projects Lab  
1518 Chestnut Ave.  
Minneapolis, MN 55403

Product: PERK.ELMER

Model: 8410 GC

Serial No.: 3948

Isotope: Ni-63

Activity: 15 mCi

Source Serial: N/A04597

Location: Radiation Storeroom

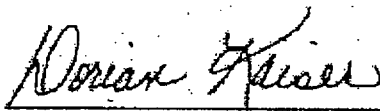
Test Type: Lab Counting

Result: ☐ Positive

☒ Negative < 2.6E-4 uCi

Analyzed on: June 13, 2002

This certificate should be maintained as a permanent record of the leak test of this product.



Dorian Kaiser  
Health Physics Technician



# Thermo MeasureTech

2555 North IH-35  
Round Rock, TX 78664

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## LEAK TEST CERTIFICATION

This is to certify that the product identified below was tested for removable contamination in accordance with Texas Radioactive Material License Number L03524, Condition 19 (Expiration: 12-31-2003).

Customer: 456500  
X-CEL ENERGY  
Special Projects Lab  
1518 Chestnut Ave.  
Minneapolis, MN 55403

Product: PERK.ELMER

Model: GC

Serial No.: 2422

Isotope: Ni-63

Activity: 15 mCi

Source Serial: N/A04317

Location: RADIATION STOREROOM

Test Type: Lab Counting

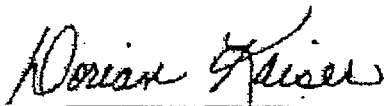
Result: ☐ Positive

☒ Negative

< 2.6E-4 uCi

Analyzed on: June 13, 2002

This certificate should be maintained as a permanent record of the leak test of this product.



Dorian Kaiser  
Health Physics Technician

# Thermo MeasureTech

TN Technologies + Kay Ray + Sensall

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(800) 736-0801  
Fax: (512) 388-9200  
www.thermomeasuretech.com

## LEAK TEST CERTIFICATION

This is to certify that the product identified below was tested for removable contamination in accordance with Texas Radioactive Material License Number L03524, Condition 19 (Expiration: 12-31-2003).

Customer: 456500  
X-CEL ENERGY  
Special Projects Lab  
1518 Chestnut Ave.  
Minneapolis, MN 55403

Product: PERKELMER

Model: GC

Serial No.: 1902

Isotope: Ni-63

Activity: 15 mCi

Source Serial: N/A04314

Location: SG300 G.C.

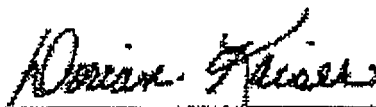
Test Type: Lab Counting

Result: ☐ Positive

☒ Negative < 2.6E-4 uCi

Analyzed on: June 13, 2002

This certificate should be maintained as a permanent record of the leak test of this product.



Dorian Kaiser  
Health Physics Technician

# Thermo MeasureTech

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Round Rock, TX 78664

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[www.thermomeasuretech.com](http://www.thermomeasuretech.com)

## LEAK TEST CERTIFICATION

This is to certify that the product identified below was tested for removable contamination in accordance with Texas Radioactive Material License Number L03524, Condition 19 (Expiration: 12-31-2003).

Customer: 456500  
X-CEL ENERGY  
Special Projects Lab  
1518 Chestnut Ave.  
Minneapolis, MN 55403

Product: PERKELMER

Model: GC

Serial No.: 3702

Isotope: Ni-63

Activity: 15 mCi

Source Serial: N/A04313

Location: PE 8410

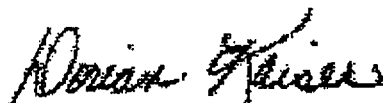
Test Type: Lab Counting

Result: ☐ Positive

☒ Negative < 2.6E-4  $\mu$ Ci

Analyzed on: June 13, 2002

This certificate should be maintained as a permanent record of the leak test of this product.



Dorian Kaiser  
Health Physics Technician