

DTE Energy Company
Fermi 2 Power Plant , 100 AIB
6400 North Dixie Highway
Newport, MI 48166



April 10, 2012

Materials Licensing Branch
U.S. Nuclear Regulatory Commission, Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Subject: Application For Amendment To Material License 21-02335-06

Dear Mr. Tran,

Please find enclosed a completed NRC Form 313 for an amendment to Material License (21-02335-06) for DTE Energy's Trenton Channel Power Plant located in Trenton, Michigan. This License amendment is for Item 10 "Radiation Safety Program", to evaluate personnel dose monitoring.

If you have any questions or require additional information, please contact me at 734-586-1697.

Sincerely,

A handwritten signature in black ink that reads "Thomas M. Lashley". The signature is written in a cursive, flowing style.

Thomas M. Lashley
Radiation Safety Officer

RECEIVED APR 13 2012

NRC FORM 313

(1-2012)

10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: (03/31/2012)

APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 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 Information Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (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 collection.

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.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND
ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA,
KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY,
NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH
CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN,
SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, MISSISSIPPI, 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 BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

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.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE
- ☒ B. AMENDMENT TO LICENSE NUMBER 21-02335-06
- ☐ C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

DTE Energy,) Fermi-2 Nuclear Power Plant
One Energy) 6400 North Dixie Highway
Detroit, MI 48226) 110 AIB
) Newport, MI 48166

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Trenton Channel Power Plant
4695 West Jefferson Ave
Trenton, Michigan

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Thomas M. Lashley

TELEPHONE NUMBER

(734) 586-1697

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 amount which will be possessed at any one time.

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)

FEE CATEGORY	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.

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 CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

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 ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE
Richard S. LaBurn, Manager - Radiation Protection

SIGNATURE



DATE

4/11/12

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

ITEM 10: RADIATION SAFETY PROGRAM

OCCUPATIONAL DOSE:

We will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 or we will provide dosimetry that meets the Criteria in the section entitled "Radiation Safety Program - Occupational Dosimetry" in NUREG-1556, Vol. 4, "Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses," dated October 1998.

Personnel Monitoring

Dosimetry is not normally issued to Trenton Channel Power Plant personnel. The routine activities described in this license are performed infrequently. Personnel authorized to perform these activities use calibrated survey meters to monitor exposure rate.

The following evaluation demonstrates that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20

There are three routine activities performed by Authorized Users that required exposure to radiation. The first activity is to open and close shutters. The second is surveying after opening and closing shutters. The third is performing a leak test every 36 months. Each activity is evaluated separately below.

Assumptions and measurements:

- Radiation readings were obtained by surveying a 100 mCi Texas Nuclear device.
- Contact reading at shutter mechanism (40 millirems /hr).
- (2 millirems /hr) at 30cm from gauge.
- 2 minutes to open or close a shutter.
- 5 minutes to perform a survey.
- 2 minutes to take a leak test wipe.

(1) Open or close shutter = 2 min x 40 millirems /hr = 1.33 millirems SDE (extremities)

(2) Survey gauge = 5 min x 2 millirems /hr = 0.16 millirems TEDE (whole body)

(3) Leak test = 2 min x 40 millirems /hr = 1.33 millirems SDE (extremities)

The applicable TEDE (whole body) limit is 5,0000 millirems per year and 10% of that value is 500 millirems per year. Activity (2) delivers 0.16 millirems, then an individual could perform 3,125 of these procedures each year and remain within 10% of the applicable limit.

The applicable shallow-dose equivalent (SDE) (extremities) is 50,000 millirems per year and 10% of that value is 5,000 per year. If activity (1) or (3) delivers 1.33 millirems then an individual could perform 3,759 of these procedures each year and remain within 10% of the applicable limit.

Based on the above situation, no dosimetry is required if a worker performs fewer than 3,125 routine maintenance procedures per year.

As such, DTE Energy requests that this license not be conditioned to require personnel monitoring of Authorized Users

From: (734) 586-1697
 Thomas Lashley
 DTE Energy
 6400 N. Dixie Highway
 Newport, MI 48166

Origin ID: NFBA



J12101112190225

Ship Date: 10APR12
 ActWgt: 0.5 LB
 CAD: 5278791/NET3250

Delivery Address Bar Code



SHIP TO: (734) 586-1697

BILL SENDER

Frank P.D. Tran
 US Nuclear Regulatory Commission
 2443 Warrenville Road
 Suite 210
 Lisle, IL 60532

Ref # N0016 001158 164
 Invoice #
 PO #
 Dept #

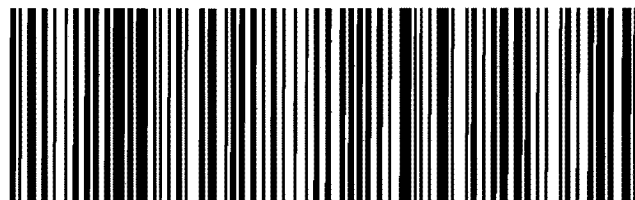
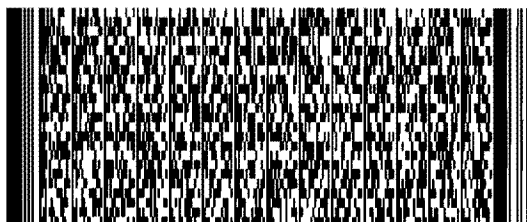
THU - 12 APR A1
 ** 2DAY **

TRK# 7982 6713 2767

0201

SE BDFA

60532
 IL-US
 ORD



512G1/C44D/A278

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.