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

DTE Energy
Detroit Edison

July 7, 2008

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

Subject: Application For Material License

Dear Sir or Madam:

Please find enclosed a completed NRC Form 313 for an Application For Material License for Detroit Edison's Monroe Power Plant located in Monroe, Michigan. This License will be for two Ohmart Model SH-F1A devices used for slurry density measurements. I am currently the Radiation Safety Officer for the following five Detroit Edison Licenses:

21-02335-05
21-02335-06
21-02335-08
21-02335-09
21-02335-12

The newly trained Authorized User's training certification is attached. If you have any questions or require additional information, please contact me at 734-586-1697.

Sincerely,

Thomas M. Lashley
Radiation Safety Officer

NRC FORM 313 (10-2005) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIAL LICENSE

APPROVED BY OMB: NO. 3150-0120 EXPIRES: 10/31/2008

Estimated burden per response to comply with this mandatory collection request: 4.4 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 and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
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
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-4005

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)*

- [X] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NUMBER _____
- [ ] C. RENEWAL OF LICENSE NUMBER _____

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

Thomas M. Lashley
EF2 110 AIB
6400 North Dixie Highway
Newport, MI 48166

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Monroe Power Plant
3500 East Front Street
Monroe, Michigan 48161

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. maiximum 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 3P AMOUNT ENCLOSED $ 1,400.00

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 CONTANED 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 C RIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURIS DICTION.

CERTIFYING OFFICER – TYPED/PRINTED NAME AND TITLE	SIGNATURE	DATE
Frank Wszelaki, Plant Director		2/28/08

FOR NRC USE ONLY

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

ITEMS 5 THROUGH 11 OF NRC FORM 313

ITEM 5: MATERIALS TO BE POSSESSED

Radioisotope
- Cesium 137

Sealed Source
- Ohmart Model A-2102

Devices
- Ohmart Model SH-F1A

Quantity
- Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate. (2) 20 mCi (0.74 GBq) sealed sources.

ITEM 6: PROPOSED USES

The fixed gauges will be used for the purposes described on the SSD Registration Certificates.

The gauges will be used for slurry density measurements.

ITEM 7: RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE

RADIATION SAFETY OFFICER:

Name: Thomas M. Lashley

Before obtaining licensed materials, the proposed RSO will have successfully completed one of the training courses described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience – Radiation Safety Officer" in NUREG-1556, Vol. 4, dated October 1998.

AND

Before being named as the RSO, future RSOs will have successfully completed the training described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience - Radiation Safety Officer" in NUREG-1556, Vol. 4, dated October 1998. Within 30 days of naming a new RSO, we will submit the new RSO's name to NRC to include in our license.

ITEM 8: PROPOSED AUTHORIZED USERS TRAINING:

Before using licensed materials, authorized users will have successfully completed the training described in Criteria in the section entitled, "Authorized Users" in NUREG-1556, Vol. 4, dated October 1998.

ITEM 9: FACILITIES AND EQUIPMENT

We will ensure that the location of each fixed gauge meets the criteria in the section entitled 'Facilities and Equipment' in NUREG-1556, Vol. 4, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses,' dated October 1998.

ITEM 10: RADIATION SAFETY PROGRAM

INSTRUMENTS:

We will use survey instruments that meet the Criteria in the section entitled "Radiation Safety Program – Instruments" in NUREG-1556, Vol. 4, "Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses," dated October 1998.

AND

Each survey meter will be calibrated by the manufacturer or other person authorized by the NRC or an Agreement State to perform survey meter calibrations.

Note: Survey meters are normally calibrated at DTE Energy's Fermi 2 Nuclear Power Plant under license NFP-43.

MATERIAL RECEIPT AND ACCOUNTABILITY:

Physical inventories will be conducted at least every 6 months or at other intervals approved by the NRC, to account for all sealed sources and devices received and possessed under the license.

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.

OPERATING AND EMERGENCY PROCEDURES:

Operating and emergency procedures will be developed, implemented, maintained, and distributed, and will meet the Criteria in the section entitled "Radiation Safety Program - Operating and Emergency Procedures" in NUREG - 1556, Vol. 4, "Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses," dated October 1998 with the following alternative:

Shutter Checks

In lieu of periodic nuclear gauge shutter tests, DTE Energy requests authority to confirm proper operation each time a shutter is operated.

1. *Proper operation is confirmed with either a hand held survey meter or nuclear gauge annunciators.*
2. *The use of a nuclear gauge annunciators requires that the level of water in the drain line on which the gauge is installed be below the gauge so that the measuring range is empty. Under this condition, the following can be expected:*
   - *OPEN Shutter The radiation beam traverses the vessel and is detected by the gauge electronics. The annunciator in the control room indicates the absence of water.*
   - *CLOSED Shutter The beam is cut off and the annunciator indicates the presence of water.*

Proper operation is confirmed by opening and closing the shutter and verifying that the annunciator indicates as expected. Anything other than expected means that the gauge electronics or the radiation source shutter are not operating properly and the cause will be determined.

LEAK TESTS:

We will implement the model leak test program published in Appendix M to NUREG-1556, Vol. 4, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses,' dated October 1998.

Leak test samples are normally analyzed by DTE Energy's Fermi 2 Nuclear Power Plant under license NFP-43. However, samples may be analyzed by an organization authorized by NRC or an Agreement State to provide leak testing services to other licensees.

MAINTENANCE:

Routine Maintenance:

We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's or distributor's written recommendations and instructions.

Non-Routine Maintenance:

The following is the information requested in Appendix N for "in-house" non-routine maintenance:

Type of work: Source holder removal, transfer to storage, and reinstallation.

The following individuals will perform source holder removal, transfer to storage, and reinstallation work on this license:

- Thomas Lashley
- Curtis Osmun

These individuals have successfully completed a 40 hour Industrial Nuclear Gauge training course.

Procedures for non-routine operations:

- Source holder removal, transfer to storage, and re-installation.
- These procedures may be performed only by individuals who are authorized on the license.

Removal and Transfer to Storage

- Using a calibrated survey meter, verify that radiation levels are less than 5 mR/hr at 30 cm from the assessable areas around the source holder. Contact the Radiation Safety Officer if readings are above normal. Otherwise, continue.
- Close and tag the shutter. When locking holes are provided, lock the shutter in place. Using a calibrated survey meter or the gauge's remote annunciator, confirm that the shutter has operated properly.
- Loosen the mounting hardware and remove the source holder from its installed location. Be aware that the source holder is heavy. Be careful not to drop it as this may cause injury to personnel or damage to the source holder shielding and shutter mechanism.

- When not installed or not in the designated storage area, the source holder must never be left unattended
- Transfer the source holder to the designated storage area. Confirm that the storage area is away from occupied spaces and routine pedestrian traffic.
- Place the source holder in the designated storage area and position the barrier rope(s) and sign(s). Using a calibrated survey meter, confirm that radiation levels are no more than 0.5 mR/hr at the perimeter of the barrier.
- Document work performed in the source holder transaction records.

Re-installation

- Using a calibrated survey meter, confirm that radiation levels are no more than 0.5 mR/hr at the perimeter of the barrier. Contact the Radiation Safety Officer if readings are above normal. Otherwise, continue.
- Remove the barrier rope(s) and sign(s). Using a calibrated survey meter, verify that radiation levels are less than 5 mR/hr at 30 cm from all areas around the source holder.
- When not installed or not in the designated storage area, the source holder must never be left unattended.
- Transfer the source holder to its previously installed location.
- Re-install the source holder. Securely tighten the mounting hardware. Be aware that the source holder is heavy. Be careful not to drop it as this may cause injury to personnel or damage to the source holder shielding and shutter mechanism.
- Perform a leak test. Using a calibrated survey meter on its lowest calibrated range, confirm that no detectable radiation is coming from the sample. Save the sample for later laboratory analysis.
- Using a calibrated survey meter, verify that radiation levels are less than 5 mR/hr at 30 cm from the assessable areas around the source holder.
- If locked, unlock the shutter. Remove the tag and open the shutter. Using a calibrated survey meter or the gauge's remote annunciator, confirm that the shutter has operated properly.
- Document work performed in the source holder transaction records. Transaction Records.

- Records shall be maintained for minimum of 3 years from the date of the transaction.

- Records shall include the date of the transaction, the Authorized User's name, the results of surveys, and the survey meter and serial used.

FIXED GAUGES USED AT TEMPORARY JOB SITES

This is not applicable to our program. We will not use fixed gauges at temporary job sites.

OHMART VEGA

Curtis Osmun

DTE Energy Monroe, MI

has successfully completed the

Ohmart/VEGA Radiation Safety Course

presented
May 5, 2008 - May 9, 2008

at
Ohmart/VEGA

Subject matter covered:

Duties of the RSO
Basic atomic theory
Measurement and monitoring techniques
Exposure calculations
Biological effects of radiation
NRC Regulations
Leak test, shutter check
Installation, relocation, and removal procedures
Hands on lab work
Proper disposal practices
Emergency procedures
DOT shipping

Mark A. Cornelissen
Radiation Safety Officer

OHMART VEGA
Technical Training Schools
Cincinnati, Ohio 45209

[redacted]
6400 N. Dixie Highway
Newport, MI 48166

CLS053008/21/24

Account: [redacted]

Delivery Address Bar Code

SHIP TO: 734-586-1697 **BILL SENDER**

Materials Licensing Branch
US Nuclear Regulatory Commission
2443 Warrenville Road
Suite 210
Lisle, IL 60532

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