January 6, 2009

Mr. Joseph Plona
Site Vice President
Nuclear Generation
The Detroit Edison Company
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: NRC INSPECTION REPORT 050-00016/08-010(DNMS) – ENRICO FERMI UNIT 1

Dear Mr. Plona:

On December 19, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the Enrico Fermi Unit 1 facility. The purpose of the inspection was to observe the conduct of characterization surveys of two excavated sites (Survey Unit OOL-01-02) within the footprint of the original survey area OOL-01, and to determine whether decommissioning activities were conducted safely and in accordance with the survey plan, "CHAR-OOL01," and NRC requirements. The inspector performed direct radiation surveys and collected soil samples from two excavated sites during an on-site inspection. At the conclusion of the on-site inspection on September 30, 2008, the NRC inspector discussed the findings with members of your staff. On December 19, 2008, the inspector completed an in-office review of the sample analysis results and discussed the findings with Mr. Martin C. Erickson of your staff.

The inspection consisted of an examination of activities at the facility as they relate to safety and compliance with the Commission's rules and regulations. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, field observations of activities in progress, and interviews with personnel.

Based on the results of this inspection, the NRC did not identify any violations.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). The NRC's document system is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

Christine Lipa, Chief
Materials Control, ISFSI, and
Decommissioning Branch

Docket No. 050000016
License No. DPR-9

Enclosure:
Inspection Report 050-00016/08-010(DNMS)

cc w/encl: J. Plona, Vice President,
Nuclear Generation
K. Hlavaty, Plant Manager
R. Gaston, Manager, Nuclear Licensing
D. Pettinari, Legal Department
Michigan Department of Environmental Quality
G. Williams, Director, Monroe County
Emergency Management Division
Supervisor - Electric Operators
T. Strong, State Liaison Officer
Wayne County Emergency Management Division

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Letter to Mr. Joseph Plona from Ms. Christine Lipa dated January 6, 2009

SUBJECT: NRC INSPECTION REPORT 050-00016/08-010(DNMS) – ENRICO FERMI UNIT 1

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.:	050000016
License No.:	DPR-9
Report No.:	050000016/08-010(DNMS)
Licensee:	Detroit Edison Company
Facility:	Enrico Fermi Unit 1
Location:	6400 North Dixie Highway Newport, MI 48166
Inspection Dates:	September 30, 2008 (on-site), and December 19, 2008 (in-office)
Inspector:	Eugenio (Gene) A. Bonano, M.S., Health Physicist
Approved by:	Christine Lipa, Chief Materials Control, ISFSI, and Decommissioning Branch

Enclosure

EXECUTIVE SUMMARY

ENRICO FERMI UNIT 1
NRC Inspection Report 050000016/08-010(DNMS)

Characterization of the original Survey Area OOL-01 had been completed. Survey Area OOL-01 is an open land area located outside the Enrico Fermi Unit 1 Controlled Area. Two ditches/holes were excavated within Survey Area OOL-01 as part of a Fermi Unit 2 work activity not related to any decommissioning project. The excavations created disturbed soils within the Survey Area OOL-01 footprint. The licensee conducted characterization surveys of the two excavated sites (Survey Unit OOL-01-02) to ensure that the excavation process did not impact Survey Area OOL-01. The characterization survey data will support the release of Survey Area OOL-01. The inspector verified that work was done safely, and in accordance with the licensee's survey plan, "CHAR-OOL01," and NRC regulatory requirements. The inspector performed direct radiation surveys (side-by-side with the licensee, and independent/random walk-over surveys), and collected three soil samples (collected from the same sample locations as the licensee).

Decommissioning Power Reactor Inspection Program

- The inspector determined that the licensee conducted work in accordance with their survey plan, "CHAR-OOL01," and NRC regulatory requirements. (Section 1.1)

Radiological and Industrial Safety

- The licensee was effective in preventing OSHA related industrial injuries and the spread of contamination and in maintaining dose to workers well below the regulatory limits. (Section 2.1)

Report Details[1]

1.0 Decommissioning Power Reactor Inspection Program

1.1 Remedial and Final Surveys at Permanently Shutdown Reactors (83801)

a. Inspection Scope

The inspector observed the licensee conduct characterization surveys of two excavated sites (Survey Unit OOL-01-02) to ensure that the excavation process did not impact the original Survey Area OOL-01. The inspector verified that work was done in accordance with the licensee's survey plan, "CHAR-OOL01," and NRC regulatory requirements. The inspector performed direct radiation surveys (side-by-side with the licensee, and independent/random walk-over surveys), and collected three soil samples (collected from the same sample locations as the licensee).

b. Observations and Findings

Characterization of the original Survey Area OOL-01 had previously been completed. Survey Area OOL-01 is an open land area located outside the Unit 1 Controlled Area. Two ditches/holes were excavated within Survey Area OOL-01 as part of a Fermi Unit 2 work activity not related to any decommissioning project. The excavations created disturbed soils within the original Survey Area OOL-01 footprint. The licensee conducted characterization surveys (100 percent surface scans) of the two excavated sites (Survey Unit OOL-01-02) in accordance with survey plan, "CHAR-OOL01," to ensure that the excavation process did not impact the original Survey Area OOL-01. The licensee used calibrated Ludlum 2350-1 data loggers with SPA-3 "Sodium-Iodide" detectors (with and without shields) in accordance with procedure MEF 217, "Operation of the Ludlum 2350-1 Digital Ratemeter," Revision 103; and performed quality checks in accordance with procedure MEF 218, "Control and Accountability of Final Status Survey Portable Instrumentation," Revision 103. The licensee's Chain-of-Custody process ensured samples collected met the data quality objectives for final status survey requirements.

The inspector used a calibrated Ludlum 2241-2 survey meter with a Ludlum 44-10 "Sodium-Iodide" detector for the side-by-side, independent/random walk-over surveys of the excavated sites. The inspector measured background radiation levels of around 11,851 to 14,000 Counts per Minute (CPM) w/shield and 22,000 to 28,542 CPM w/o shield within the excavated sites. Background radiation levels were much higher outside of the excavated sites. The Unit 2 reactor had a direct influence on the background radiation levels. The inspector did not detect radiation levels above the stated background levels within the excavated sites.

The inspector collected three soil samples from within the two excavated holes at locations where the licensee also collected their samples (CHAR-OOL-01-02-003, CHAR-01-02-004, and CHAR-OOL-01-02-008/008-S). The Oak Ridge Institute for

[1]A list of acronyms used and all documents reviewed in these "Details" are provided at the end of the report.

Science and Education (ORISE) located in Oak Ridge, Tennessee, analyzed the NRC samples. A gross alpha, gross beta, gamma spectroscopy, and tritium analysis was performed. The laboratory reported (see ADAMS ML083290351) results less than Minimum Detectable Concentrations (MDC) less than 200 DPM, and less than the screening Derived Concentration Guideline Levels (DCGL) listed in the licensee's CHAR-OOL01 survey plan. Sample CHAR-OOL-01-02-008/008-S was a split sample analyzed by the licensee's on-site lab (CHAR-OOL-01-02-008) and contract lab, GEL Laboratories LLC, (CHAR-OOL-01-02-008-S). The licensee also reported concentration levels less than the screening DCGLs listed in the survey plan for the radioisotopes of concern.

c. Conclusions

The inspector determined that the licensee conducted work in accordance with their survey plan, "CHAR-OOL01," and NRC regulatory requirements.

2.0 Radiological and Industrial Safety

2.1 Occupational Radiation Exposure (83750), Occupational Safety and Health Administration (OSHA) Interface Activities (93001)

a. Inspection Scope

The inspector observed the licensee conduct characterization surveys of two excavated sites (Survey Unit OOL-01-02) to verify that work was done safely. The inspector attended pre-job briefings, reviewed two workers' training records, and interviewed personnel.

b. Observations and Findings

The licensee's pre-job safety briefings, which covered both industrial and radiological hazards, were informative and thorough. The two selected training records were complete and the individual workers had the proper training for the work assigned. Health and safety personnel and the workers were knowledgeable of their responsibilities of the work to be performed and the hazards associated with the job to prevent injuries and release of any radioactive contamination beyond the cordoned off excavated sites.

c. Conclusions

The licensee was effective in preventing OSHA related industrial injuries and the spread of contamination and in maintaining dose to workers well below the regulatory limits.

3.0 Exit Meeting

The inspector presented the inspection results to members of the licensee's staff at the conclusion of the on-site inspection on September 30, 2008; and discussed findings of a December 19, 2008 in-office review of laboratory sample results with Mr. Martin C. Erickson. The licensee did not identify any of the documents or processes reviewed by the inspector as proprietary.

Attachment: Supplemental Information

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

L. Goodman, Manager, Fermi 1 (Custodian)
M. Erickson, Bartlett Contractor
D. Breiding, Fermi 1 Project Coordinator
C. Aldridge-Nunn, Office Administration

LIST OF PROCEDURES USED

IP 83750:	Occupational Radiation Exposure
IP 83801:	Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors
IP 93001:	OSHA Interface Activities

LIST OF ACRONYMS USED

ADAMS	Agency Document and Management System
CFR	Code of Federal Regulations
CPM	Counts per Minute
DCGL	Derived Concentration Guideline Level
DNMS	Division of Nuclear Materials Safety
DPM	Disintegrations per Minute
MDC	Minimum Detectable Concentration
NRC	Nuclear Regulatory Commission
ORISE	Oak Ridge Institute for Science and Education
OSHA	Occupational Safety and Health Administration
PARS	Publicly Available Records

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LICENSEE DOCUMENTS REVIEWED

Licensee documents reviewed and utilized during the course of this inspection are specifically identified in the “Report Details” above.