



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

November 11, 2010

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

SUBJECT: NRC INSPECTION REPORT 050-00016/10-13(DNMS) - ENRICO
FERMI UNIT 1

Dear Mr. Plona:

On November 4, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the Enrico Fermi Unit 1 facility. The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on November 4, 2010, the NRC inspector discussed the findings with members 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 included facility management and control, radiological safety, and closeout inspection and survey. 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 NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

J. Plona

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

Sincerely,

/RA/

Brian J. Kemker, Acting Chief
Materials Control, ISFSI, and
Decommissioning Branch

Docket No. 050-00016
License No. DPR-9

Enclosure:
Inspection Report 050-00016/10-13(DNMS)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.: 050-00016

License No.: DPR-9

Report No.: 050-00016/10-13(DNMS)

Licensee: Detroit Edison Company

Facility: Enrico Fermi Unit 1

Location: 6400 North Dixie Highway
Newport, MI 48166

Inspection Dates: November 1 through 4, 2010

Inspector: Peter J. Lee, Ph.D., CHP, Health Physicist

Approved by: Brian J. Kemker, Acting Chief
Materials Control, ISFSI, and
Decommissioning Branch
Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

Enrico Fermi Unit 1 NRC Inspection Report 050-00016/10-13(DNMS)

This routine decommissioning inspection included reviews of facility management and control, radiological safety, and final status and confirmatory survey.

Facility Management and Control

- The inspector concluded that the conditions of the facility and equipment were adequate and capable of supporting the decommissioning activities. (Section 1.1)

Radiological Safety

- The inspector determined that the licensee continued to be effective in maintaining dose to workers well below the regulatory limits. (Section 2.1)

Closeout Inspection and Survey

- The inspector determined that the licensee properly designed the final status survey in accordance with the Multi-Agency Radiation Survey and Site Investigation Manual guidance. (Section 3.0)

Report Details¹

Summary of Plant Activities

During the inspection period, the licensee was continuing decommissioning activities and preparing for the reactor vessel removal project.

1.0 Facility Management and Control

1.1 Decommissioning Performance and Status Review at Permanently Shut Down Reactors

a. Inspection Scope (71801)

The inspector toured the plant to assess the working conditions of the decommissioning activities.

b. Observations and Findings

During the inspection, contract workers were cutting the lower section of the reactor vessel and the steam cleaning machine chamber. Workers wore appropriate protective equipment and followed established procedures. The licensee maintained the work location with adequate shielding, personnel barriers, and high efficiency particulate air filter exhaust systems, all to minimize worker doses. All radiological areas were adequately marked and posted.

c. Conclusions

The inspector concluded that the conditions of the facility and equipment were adequate and capable of supporting the decommissioning activities.

2.0 Radiological Safety

2.1 Occupational Radiation Exposure (83750)

a. Inspection Scope

The inspector interviewed the licensee personnel and reviewed the work requests for cutting up the reactor vessel and steam cleaning machine chamber to evaluate the effectiveness of licensee controls to minimize potential radiation exposure to the workers.

b. Observations and Findings

Inside the steam cleaning chamber, the cleaning machine chamber was used to clean sodium off fuel rods, including damaged fuel rods. To prevent internal exposure to the workers, the licensee took additional precaution to vent the air right next to the clean machine chamber prior to breaching the chamber. During cutting up the steam cleaning machine chamber, the air concentrations in the steam cleaning chamber were well below the derived air concentrations.

Based on a review of external exposure records from January 1, 2010 to October 31, 2010, workers received doses less than the dose limits specified in radiation work permits. The total personnel external exposures were 5,979 millirem (mrem) and the highest dose received by an individual was 610 mrem.

c. Conclusions

The inspector determined that the licensee continued to be effective in maintaining dose to workers well below the regulatory limits.

3.0 Closeout Inspection and Survey (83890)

a. Inspection Scope

The inspector interviewed licensee personnel and reviewed the final status surveys of survey units on which Oak Ridge Institute for Science and Education (ORISE) conducted confirmatory surveys. The inspector also observed the survey conducted by ORISE.

b. Observations and Findings

The ORISE completed the confirmatory surveys in the plant perimeter area, Fuel and Repair Building exterior walls and roof, Inert Gas Building roof, Waste Gas Building roof, Sodium Building walls and roof, and Decay Pool. The minimum detectable concentrations of detectors used to conduct the surface scan met the derived concentration guideline levels stated in the final status survey plan and no positive identifications were identified during the confirmatory survey.

c. Conclusions

The inspector determined that the licensee properly designed the final status survey in accordance with the Multi-Agency Radiation Survey and Site Investigation Manual guidance.

4.0 Exit Meeting

The inspector presented the inspection results to members of the licensee's staff at the conclusion of the inspection on November 4, 2010. 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
W. Colonnello, Director, Nuclear Support, Fermi 1
 - * D. Randall, License Termination Manager
 - * K. Lindsey, Radiation Protection Supervisor
D. Breiding, Reactor Project Manager
D. Swindle, Sodium Project Manager
 - * C. Aldridge-Nunn, Office Administration
 - * L. Davis, Office Specialist
- * Present at the November 4, 2010, exit meeting.

LIST OF PROCEDURES USED

- IP 83750: Occupational Radiation Exposure
- IP 83890: Closeout Inspection and Survey
- IP 71801: Decommissioning Performance and Status Review at Permanently Shut Down Reactors

LIST OF ACRONYMS USED

- ADAMS Agency Document and Management System
- CFR Code of Federal Regulations
- DNMS Division of Nuclear Materials Safety
- MREM Millirem
- NRC Nuclear Regulatory Commission
- ORISE Oak Ridge Institute for Science and Education

LICENSEE DOCUMENTS REVIEWED

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

ITEMS OPENED, CLOSED, AND DISCUSSED

None

J. Plona

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

Sincerely,

/RA/

Brian J. Kemker, Acting Chief
Materials Control, ISFSI, and
Decommissioning Branch

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