June 12, 2006

EA 06-094

Mr. Donald K. Cobb
Assistant Vice President
Nuclear Generation
The Detroit Edison Company
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: EXERCISE OF ENFORCEMENT DISCRETION [NRC INSPECTION REPORT 050-00016/06-007(DNMS)] - ENRICO FERMI UNIT 1

Dear Mr. Cobb:

This refers to the inspection conducted by the U.S. Nuclear Regulatory Commission (NRC) at the Detroit Edison Company (DECO) Enrico Fermi Nuclear Plant, Unit 1, on March 15 and March 16, 2006, with continuing in-office review through May 4, 2006. One apparent violation of NRC requirements was identified during the inspection. The apparent violation concerned the apparent unlicensed possession of depleted uranium (DU) in a fuel gripper cask lower gate valve housing in the Fuel and Repair Building. On May 4, 2006, your staff informed the NRC that the DU was transferred from Fermi 1 to an authorized recipient for disposal.

Based on the information developed during the inspection and the information contained in an April 7, 2006, letter from your staff, the NRC has determined that a violation of NRC requirements occurred. The circumstances surrounding the violation are described in detail in the subject inspection report. In summary, correspondence during 1975 from the Power Reactor Development Company (PRDC), holder of the NRC license for Fermi 1 prior to DECO, indicated that the gripper cask did not contain any DU and all DU was shipped from the facility. That correspondence was a part of the documentation used as a basis to transfer the NRC license from PRDC to DECO. As a result, neither a specific or a general license authorized DECO to possess DU or other materials pursuant to 10 CFR Part 40. Also, another gripper cask at Fermi 1 contained lead shielding, rather than DU shielding. Therefore, the discovery of DU in the gripper cask on March 8, 2006, was not expected by your staff, and Condition Assessment Resolution Document (CARD) No. 06-21195 was prepared by your staff to document the presence of DU. The unauthorized possession of DU is a violation of your NRC license and is considered to be a violation of low safety or environmental significance. Therefore, the violation is categorized in accordance with the NRC Enforcement Policy at Severity Level IV. The current Enforcement Policy is included on the NRC's Web site at www.nrc.gov; select **What We Do**, **Enforcement**, then **Enforcement Policy**.

The NRC staff recognizes that upon discovery of the DU, your staff took prompt action to transfer the DU to an authorized recipient for disposal. Therefore, to encourage prompt identification and comprehensive correction of violations, and in recognition of the

good performance of DECO at Fermi 1, I have been authorized, after consultation with the Director, Office of Enforcement and the Regional Administrator, to exercise enforcement discretion pursuant to Section VII.B.6 of the NRC Enforcement Policy and not issue a Notice of Violation in this case. However, significant violations in the future could result in escalated enforcement action.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance was achieved will be adequately addressed on the docket upon issuance of the enclosed Inspection Report No. 050-00016/06-007(DNMS). Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, clearly mark your response as a “Reply to an Exercise of Enforcement Discretion, EA-06-094,” and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator and the Enforcement Officer, Region III, and a copy to the Resident Inspector at the Fermi 2 facility, within 30 days of the date of this letter. If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Please contact Jamnes Cameron, Chief, Decommissioning Branch, with questions.
Mr. Cameron can be reached at telephone number (630) 829-9833.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (should you choose to respond) will be made available electronically for public inspection in the NRC Public Document Room or from the NRC’s document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. The NRC also includes significant enforcement actions on its Web site at www.nrc.gov; select **What We Do**, **Enforcement**, then **Significant Enforcement Actions**.

Sincerely,

/RA/

Steven A. Reynolds, Director
Division of Nuclear Materials Safety

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

Enclosure:
Inspection Report No. 050-00016/06-007(DNMS)

FILE NAME: G:\EICS\06-094 EA Fermi 1 - Exercise of Enforcement Discretion Final.wpd

Publicly Available ☐ Non-Publicly Available ☐ Sensitive Non-Sensitive

To receive a copy of this document, indicate in the box: "C" = Copy w/o att/encl "E" = Copy w/att/encl "N" = No copy

OFFICE	RIII	E	NMSS[1]	E	D:OE[2]	E	RIII	N	RIII[3]	E		
NAME	Weil		Morell		Johnson		O'Brien C.Weil for		Reynolds			
DATE	06/05/06		05/30/06		06/05/06		06/05/06		06/12/06			

OFFICIAL RECORD COPY

[1] NMSS concurrence received on 05/30/2006 from G. Morell, NMSS.

[2] OE concurrence and approval to use enforcement discretion under Section VII.B.6 of the NRC Enforcement Policy received on 06/05/2006 from D. Solorio, OE.

[3] Consultation with Regional Administrator in 05/30/2006 memorandum from J. Caldwell to M. Johnson.

cc w/encl: Compliance Supervisor
G. White, Michigan Public Service Commission
Planning Manager, Emergency Management Division
MI Department of State Police
R. Gatson, Manager, Nuclear Licensing
D. Pettinari, Legal Department
Michigan Department of Environmental Quality
Waste and Hazardous Materials Division
M. Yudasz, Jr., Director, Monroe County
Emergency Management Division
Supervisor - Electric Operators
Wayne County Emergency Management Division

Letter to Donald K. Cobb from Steven A. Reynolds dated

SUBJECT: EXERCISE OF ENFORCEMENT DISCRETION [NRC INSPECTION REPORT 050-00016/06-007(DNMS)] - ENRICO FERMI UNIT 1

DISTRIBUTION:
ADAMS (PARS)
SECY
OCA
L. Reyes, EDO
M. Virgilio, DEDMRS
M. Johnson, OE
D. Solorio, OE
D. Starkey, OE
J. Caldwell, RIII
G. Grant, RIII
L. Chandler, OGC
B. Jones, OGC
J. Strosnider, NMSS
G. Morell, NMSS
C. M. Craig, NMSS
T. Smith, NMSS
D. Holody, Enforcement Officer, RI
C. Evans, Enforcement Officer, RII
K. O'Brien, Enforcement Officer, RIII
K. Fuller, Enforcement Officer, RIV
E. Brenner, OPA
H. Bell, OIG
J. Schlueter, OSTP
S. Reynolds, RIII
G. Shear, RIII
J. Cameron, RIII
C. Weil, RIII
J. Strasma, RIII:PA
R. Lickus, RIII
J. Lynch, RIII
OEWEB
OEMAIL
State of Michigan
Docket File
SRI Fermi
RIII PRR
CAC (e-mail)
ROPreports@nrc.gov

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.	050-00016
License No.	DPR-9
Report No.	050-00016/06-007(DNMS)
Licensee:	Detroit Edison Company
Facility:	Enrico Fermi Unit 1
Location:	6400 North Dixie Highway Newport, MI 48166
Dates:	March 15 through 16, 2006 (onsite) May 4, 2006 (in-office review)
Inspector:	Peter J. Lee, Ph.D., CHP, Health Physicist
Approved by:	Jamnes L. Cameron, Chief Decommissioning Branch

EXECUTIVE SUMMARY

Enrico Fermi Unit 1
NRC Inspection Report 050-00016/06-007(DNMS)

This routine decommissioning inspection included reviews of facility management and control, and radiological safety.

Facility Management and Control

- The inspector determined that the licensee effectively met procedural requirements by identifying, documenting, and implementing appropriate corrective actions in response to events involving the discovery of DU ingots and two issues identified with a shipment of Dry Active Waste. (Section 1.1)

- The inspector determined that the licensee's process for evaluating the safety impacts of design changes was in compliance with the requirements of 10 CFR 50.59. (Section 1.2)

Radiological Safety

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

- The inspector verified that the licensee maintained effluent releases well below the 10 CFR Part 20 release limits. (Section 2.2)

- The inspector determined that the licensee had complied with NRC and Department of Transportation regulations for shipments of radioactive waste. (Section 2.3)

Report Details[4]

Summary of Plant Activities

During the inspection period, the licensee was preparing for sodium removal from the reactor.

1.0 Facility Management and Control

1.1 Self-Assessment, Auditing, and Corrective Action (40801)

a. Inspection Scope

The inspector reviewed the licensee's Condition Assessment Resolution Document (CARD) No. 06-21195, which documented unexpected discovery of depleted uranium, and CARD No. 06-21087, which documented issues with a waste shipment, to determine if procedural requirements were being met.

b. Observations and Findings

On March 8, 2006, the licensee discovered an array of depleted uranium (DU) ingots while removing a cover plate from the fuel gripper cask lower gate valve housing in the Fuel and Repair Building. (During operation, the licensee used the gripper cask to transfer spent fuel between the Reactor Building and the Fuel and Repair Building.) The licensee documented the finding in CARD No. 06-21195 and took immediate actions to prevent the possible spread of the contamination from the DU. The licensee also took air samples in the vicinity of the work area to verify that there were no significant airborne concentrations resulting from slight contamination on the surface of the DU ingots.

The licensee did not expect to find any DU at the facility, based on information available at the time the license was transferred from the Power Reactor Development Company to Detroit Edison in 1975. In a November 6, 1975 letter, the former licensee, Power Reactor Development Company, advised the NRC that all depleted uranium had been shipped offsite. In addition, Supplement 1 to Fermi 1 Retirement Report NP-20047, stated that the fuel gripper cask did not contain DU. As a result, the Fermi 1 license does not include provisions for the possession of source materials, such as depleted uranium.

The licensee completed characterization of the DU ingots and transferred them to an authorized recipient for disposal during the week of May 1, 2006. Although the licensee's possession of unauthorized material constituted a violation of NRC regulatory requirements, the NRC is exercising discretion by not issuing the violation. This decision is based on: (1) the possession of the unauthorized material did not present a significant safety hazard; (2) the licensee was qualified to safely handle the material; and (3) the licensee made prompt arrangements to properly transfer the unauthorized material from its possession.

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

On March 1, 2006, Duratek notified the licensee that two issues were identified with a shipment of Dry Active Waste, No. 05-003, sent to Duratek on October 26, 2005. The licensee documented these issues in CARD No. 06-21087. One issue was that there were two air filters marked as lead contamination and no hazardous lead waste classification was provided. The other issue was that a 76-pound bag of asbestos waste was included in the shipment but was not listed on the manifest. As a corrective action the licensee implemented a policy that in the future, each bag of waste would be inspected for lead and asbestos contamination.

In response to both CARD No. 06-21195 and 06-21087 the licensee assigned appropriate significance levels to the issues, which dictated the degree of follow-up actions required. Root cause analyses were completed, which were used to determine the scope of the corrective actions. The inspector verified that the licensee had implemented the corrective actions to prevent similar future incidents.

c. Conclusions

The inspector determined that the licensee effectively met procedural requirements by identifying, documenting, and implementing appropriate corrective actions in response to events involving the discovery of DU ingots and two issues identified with a shipment of Dry Active Waste.

1.2 Safety Reviews, Design Changes, and Modifications (37801)

a. Inspection Scope

The inspector reviewed the licensee's safety screening reviews to determine if completed reviews met the requirements of 10 CFR 50.59. The review included selected screening reviews completed since September 2005.

b. Observations and Findings

The licensee's Administrative Controls and Surveillance Procedures Manual, Section 1.6 was consistent with the NRC's requirements for 10 CFR 50.59 screening reviews. The licensee conducted two safety screening reviews of design changes to support the sodium removal operation in the reactor. One design change that was reviewed was the disassembling of the reactor rotating shield plug and the other design change that was reviewed was the disassembling of the offset handling mechanism drive. Neither of these design changes required a formal 10 CFR 50.59 safety evaluation.

c. Conclusions

The inspector determined that the licensee's process for evaluating the safety impacts of design changes was in compliance with the requirements of 10 CFR 50.59.

2.0 Radiological Safety

2.1 Occupational Radiation Exposure (83750)

a. Inspection Scope

The inspector reviewed the results of air sampling, direct radiation surveys, and contamination surveys performed during sodium removal from the Loop 1 of primary sodium loops in December 2005 and during preparation for sodium removal from the reactor in the first quarter of 2006, and reviewed the external exposure records for the year of 2005, to determine if the licensee was meeting regulatory dose limits for worker exposure.

b. Observations and Findings

The results of air sampling did not indicate any potential intake of radioactive material by the workers. The results of personnel monitoring, reviewed by the inspector, indicated all exposures were less than 10 percent of any applicable occupational limit in 10 CFR Part 20.

The results of contamination surveys did not indicate any spread of contamination during processing sodium removal. The direct radiation surveys from the work areas did not indicate any significant potential exposure for the workers.

c. Conclusions

The inspector determined that the licensee continued to be effective in preventing the spread of contamination and in maintaining dose to workers well below the regulatory limits.

2.2 Radioactive Waste Treatment, Effluent and Environmental Monitoring (84750)

a. Inspection Scope

The inspector reviewed the analytical data for gaseous effluent releases for particulates and tritium during processing primary Loop 1 sodium removal in December 2005, to verify that the licensee met 10 CFR Part 20 effluent release limits.

b. Observations and Findings

The air sampling at the effluence release did not indicate any positive result for particulates. The highest tritium concentration was about 4×10^{-10} µCi/ml which is well below the limit in 10 CFR Part 20.

c. Conclusions

The inspector verified that the licensee maintained effluent releases well below the 10 CFR Part 20 release limits.

2.3 Solid Radioactive Waste Management and Transportation of Radioactive Materials (86750)

a. Scope

The inspector reviewed radioactive waste shipping documents and conducted interviews of the responsible individual to ensure compliance with NRC and U. S. Department of Transportation (DOT) regulations.

b. Observations and Findings

Since the last inspection on September 21, 2005, the licensee made one shipment of Dry Active Waste on March 1, 2006. The waste was stored temporarily in an approved location, before being shipped in Sea Land containers to GTS Duratek, an approved vendor, for processing and eventual disposal. The licensee's shipping manifest showed that personnel packaged, labeled, and marked each shipping container according to the DOT and
10 CFR Part 71 transportation requirements. The licensee verified that the results of radiation and removable contamination levels were within applicable limits. The waste manifest included all required information.

c. Conclusions

The inspector determined that the licensee had complied with NRC and Department of Transportation regulations for shipments of radioactive waste.

3.0 Exit Meeting

The inspector presented the inspection results to members of the licensee's staff at the conclusion of the inspection on March 16, 2006. The Chief, Decommissioning Branch, conducted a final exit meeting on April 21 with Lynn Goodman, and discussed the proposed disposition of the potential violation associated with the unauthorized possession of depleted uranium. On May 4, Ms. Goodman contacted the Chief, Decommissioning Branch, to confirm that the depleted uranium had been transferred from the site. 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

W. Colonnello, Director, Nuclear Support
S. Stasek, Director, Nuclear Project
L. Goodman, Manager, Fermi 1 (Custodian)
W. Lipton, Principal Engineer, Fermi 2
D. Breiding, Fermi 1 Project Coordinator
D. Swindle, Sodium Project Manager
C. Aldridge-Nunn, Office Administration

All of the above were in attendance at the exit meeting on March 16, 2006.

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF PROCEDURES USED

IP 40801:	Self-Assessment, Auditing, and Corrective Actions at Permanently Shutdown Reactors
IP 83750:	Occupational Radiation Exposure
IP 84750:	Radioactive Waste Treatment and Effluent and Environmental Monitoring
IP 86750:	Solid Radioactive Waste Management and Transportation of Radioactive Materials
IP 37801	Safety Reviews, Design Changes, and Modifications

LICENSEE DOCUMENTS REVIEWED

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

LIST OF ACRONYMS USED

ADAMS	Agency Document and Management System
CARD	Condition Assessment Resolution Document
CFR	Code of Federal Regulations
DNMS	Division of Nuclear Materials Safety
DOT	Department of Transportation
DU	depleted uranium
NRC	Nuclear Regulatory Commission