

March 2, 2005

Mr. William O'Connor, Jr.  
Vice President  
Nuclear Generation  
Detroit Edison Company  
6400 North Dixie Highway  
Newport, MI 48166

SUBJECT: ANNUAL ASSESSMENT LETTER FERMI NUCLEAR POWER PLANT, UNIT 2  
(REPORT 05000341/200501)

Dear Mr. O'Connor:

On February 8, 2004, the NRC staff completed its end-of-cycle plant performance assessment of the Fermi 2 Nuclear Power Plant. The end-of-cycle review involved the participation of the reactor technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2004. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Overall, Fermi 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Regulatory Response column of the NRC's Action Matrix based on one White PI in the Emergency AC Power System Unavailability area of the Mitigating Systems cornerstone that originated in the third quarter of the 2003 assessment period. A supplemental inspection to review the circumstances surrounding this White PI was conducted in accordance with Inspection Procedure (IP) 95001, "Inspection For One Or Two White Inputs In A Strategic Performance Area." The inspection determined that your staff adequately completed the root cause analysis of the event and identified appropriate corrective actions. All other inspection findings were classified as having very low safety significance (Green) and all performance indicators indicated performance at a level requiring no additional oversight (Green).

Over the past 12 months, several findings sharing the common causal factor of personnel errors and involving various departments at the site have been identified in the Human Performance cross-cutting area. Examples included: a reactor vessel head weld examination was performed in the wrong location; the refueling shield bridge was improperly installed; the drywell head was transported over a portion of the refueling pool in violation of procedures;

repetitive failures of the turbine lube oil vapor extractors caused by the failure to lubricate the associated motor bearings as required by the vendor manual; and maintenance staff failed to quarantine degraded electrical components from the high pressure coolant injection system. In addition to these performance errors, recent events at Fermi involving improper operation of shutdown cooling and the missed emergency action level declaration for a high radiation alarm further demonstrated human performance problems at Fermi. Therefore, in accordance with the criteria described in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," Section 0305-06.06.i. "Substantive Cross-Cutting Issues," we are initiating a substantive cross-cutting human performance issue. Reduction in the number, significance, and common causality is needed to resolve this issue. We will monitor your performance in the human performance cross-cutting area through the baseline inspection program and evaluate the results in our semi-annual trend review at the mid-cycle assessment point.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2006. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspection plan for the last nine months is tentative and may be revised at the midcycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Eric Duncan at (630) 829-9628 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Mark A. Satorius, Director  
Division of Reactor Projects

Docket No. 50-341  
License No. NPF-43

Enclosure: Fermi 2 Inspection/Activity Plan

See Attached Distribution

repetitive failures of the turbine lube oil vapor extractors caused by the failure to lubricate the associated motor bearings as required by the vendor manual; maintenance staff failed to quarantine degraded electrical components from the high pressure coolant injection system. In addition to these performance errors, recent events at Fermi involving improper operation of shutdown cooling and the missed emergency action level declaration for a high radiation alarm that had human performance aspects further demonstrated human performance problems at Fermi. Therefore, in accordance with the criteria described in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," Section 0305-06.06.i. "Substantive Cross-Cutting Issues," we are initiating a substantive cross-cutting human performance issue. Reduction in the number, significance, and common causality is needed to resolve this issue. We will monitor your performance in the human performance cross-cutting area through the baseline inspection program and evaluate the results in our semi-annual trend review at the mid-cycle assessment point.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2006. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspection plan for the last nine months is tentative and may be revised at the midcycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Eric Duncan at (630) 829-9628 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Mark A. Satorius, Director  
Division of Reactor Projects

Docket No. 50-341  
License No. NPF-43

Enclosure: Fermi 2 Inspection/Activity Plan

See Attached Distribution

DOCUMENT NAME: G:\Branch TSS\EOC Ltrs\leoc 030205\Fermi.wpd

To receive a copy of this document, indicate in the box "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RIII		RIII						
NAME	RLerch:co		MSatorius						
DATE	03/ /05		03/ /05						

**OFFICIAL RECORD COPY**

W. O'Conner

-3-

cc w/encl: N. Peterson, Manager, Nuclear Licensing  
D. Pettinari, Corporate Legal Department  
Compliance Supervisor  
G. White, Michigan Public Service Commission  
L. Brandon, Michigan Department of Environmental Quality  
Monroe County, Emergency Management Division  
Planning Manager, Emergency Management Division  
MI Department of State Police

ADAMS Distribution:

LXR1

DPB

RidsNrrDipmlipb

GEG

KGO

SJC4

CAA1

DRPIII

DRSIII

PLB1

JRK1

[ROPreports@nrc.gov](mailto:ROPreports@nrc.gov) (inspection reports, final SDP letters, any letter with an IR number)

Institute of Nuclear Power Operations (INPO)

**Fermi**  
**Inspection / Activity Plan**  
**03/01/2005 - 09/30/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71122.02 - RADWASTE &amp; TRANSPORTATION</b>		<b>1</b>			
2	IP 7112202	Radioactive Material Processing and Transportation		02/28/2005	03/04/2005	Baseline Inspections
	<b>71114 - BASELINE EP INSPECTION</b>		<b>1</b>			
2	IP 7111402	Alert and Notification System Testing		04/25/2005	04/29/2005	Baseline Inspections
2	IP 7111403	Emergency Response Organization Augmentation Testing		04/25/2005	04/29/2005	Baseline Inspections
2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		04/25/2005	04/29/2005	Baseline Inspections
2	IP 711151	Performance Indicator Verification		04/25/2005	04/29/2005	Baseline Inspections
	<b>HEATSKB - BIENNIAL HEAT SINK INSPECTION</b>		<b>1</b>			
2	IP 7111107B	Heat Sink Performance		05/09/2005	05/13/2005	Baseline Inspections
	<b>71121.01 - RADIOLOGICAL ACCESS CONTROL</b>		<b>1</b>			
2	IP 7112101	Access Control to Radiologically Significant Areas		05/16/2005	05/20/2005	Baseline Inspections
2	IP 711151	Performance Indicator Verification		05/16/2005	05/20/2005	Baseline Inspections
	<b>FPI - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>3</b>			
2	IP 7111105T	Fire Protection		06/27/2005	07/15/2005	Baseline Inspections
	<b>71122.01 - RADIOLOGICAL EFFLUENT CONTROL</b>		<b>1</b>			
2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		08/22/2005	08/26/2005	Baseline Inspections
2	IP 711151	Performance Indicator Verification		08/22/2005	08/26/2005	Baseline Inspections
	<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>3</b>			
2	IP 711152B	Identification and Resolution of Problems		10/17/2005	11/04/2005	Baseline Inspections
	<b>SSDPC - SAFETY SYSTEM DESIGN &amp; PERFORMANCE</b>		<b>5</b>			
2	IP 7111121	Safety System Design and Performance Capability		11/14/2005	12/02/2005	Baseline Inspections
	<b>71111.11 - LIC OPERATOR REQUAL PROGRAM EVALUATION</b>		<b>2</b>			
2	IP 7111111B	Licensed Operator Requalification Program		12/05/2005	12/09/2005	Baseline Inspections
	<b>71121.02 - NON-OUTAGE ALARA</b>		<b>1</b>			
2	IP 7112102	ALARA Planning and Controls		12/05/2005	12/09/2005	Baseline Inspections
2	IP 711151	Performance Indicator Verification		12/05/2005	12/09/2005	Baseline Inspections
	<b>MAINT - MAINTENANCE EFFECTIVENESS</b>		<b>1</b>			
2	IP 7111112B	Maintenance Effectiveness		01/09/2006	01/13/2006	Baseline Inspections
	<b>ISI - FERMI ISI INSPECTION</b>		<b>1</b>			
2	IP 7111108G	Inservice Inspection Activities - BWR		03/13/2006	03/17/2006	Baseline Inspections
	<b>7112102 - ALARA PLANNING AND CONTROLS</b>		<b>1</b>			
2	IP 7112102	ALARA Planning and Controls		03/13/2006	03/17/2006	Baseline Inspections
2	IP 711151	Performance Indicator Verification		03/13/2006	03/17/2006	Baseline Inspections
	<b>7111401 - EP EXERCISE BASELINE</b>		<b>2</b>			
2	IP 7111401	Exercise Evaluation		06/05/2006	06/09/2006	Baseline Inspections

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Fermi**  
**Inspection / Activity Plan**  
**03/01/2005 - 09/30/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>7111401 - EP EXERCISE BASELINE</b>		<b>2</b>			
2	IP 71151	Performance Indicator Verification		06/05/2006	06/09/2006	Baseline Inspections
	<b>7112101 - RADIOLOGICAL ACCESS CONTROL</b>		<b>1</b>			
2	IP 7112101	Access Control to Radiologically Significant Areas		06/19/2006	06/23/2006	Baseline Inspections
2	IP 71151	Performance Indicator Verification		06/19/2006	06/23/2006	Baseline Inspections
	<b>MOD/5059 - MODIFICATION/50.59 INSPECTIONS</b>		<b>2</b>			
2	IP 7111102	Evaluation of Changes, Tests, or Experiments		07/24/2006	08/11/2006	Baseline Inspections
2	IP 711117B	Permanent Plant Modifications		07/24/2006	08/11/2006	Baseline Inspections
2	IP 7111123	Temporary Plant Modifications		07/24/2006	08/11/2006	Baseline Inspections
	<b>7112103 - RADIOLOGICAL INSTRUMENTATION</b>		<b>1</b>			
2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		09/25/2006	09/29/2006	Baseline Inspections
2	IP 71151	Performance Indicator Verification		09/25/2006	09/29/2006	Baseline Inspections