August 25, 2006

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

SUBJECT: FERMI POWER PLANT, UNIT 2, NRC EVALUATION OF CHANGES, TESTS, OR EXPERIMENTS AND PERMANENT PLANT MODIFICATIONS BASELINE INSPECTION REPORT 05000341/2006011(DRS)

Dear Mr. Cobb:

On August 3, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed a combined baseline inspection of the Evaluation of Changes, Tests, or Experiments and Permanent Plant Modifications at the Fermi Power Plant. The enclosed report documents the results of the inspection, which were discussed with you and others of your staff at the completion of the inspection.

The inspectors examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Based on the results of the inspection, no findings of significance were identified.

In accordance with 10 CFR Part 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) accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

David Hills, Chief
Engineering Branch 1
Division of Reactor Safety

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

Enclosure: Inspection Report 05000341/2006011(DRS)

cc w/encl: K. Hlavaty, Plant Manager
R. Gaston, 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
State Liaison Officer, State of Michigan
Wayne County Emergency Management Division

document system (ADAMS) accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

David Hills, Chief
Engineering Branch 1
Division of Reactor Safety

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

Enclosure: Inspection Report 05000341/2006011(DRS)

cc w/encl: K. Hlavaty, Plant Manager
R. Gaston, 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
State Liaison Officer, State of Michigan
Wayne County Emergency Management Division

ADAMS Distribution:
LXR1
DHJ
RidsNrrDirsIrib
GEG
KGO
RMM3
CAA1
LSL (electronic IR's only)
C. Pederson, DRS (hard copy - IR's only)
DRPIII
DRSIII
PLB1
TXN
ROPreports@nrc.gov (inspection reports, final SDP letters, any letter with an IR number)

DOCUMENT NAME:E:\Filenet\ML062420499.wpd
☐ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☐ Non-Sensitive
To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII	DRS	RIII	DRS	RIII			
NAME	JJacobson:jb		Mring forCLipa		DHills			
DATE	08/17/06		08/25/06		08/25/06			

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.:	50-341
License No.:	NPF-43
Report No.:	05000341/2006011
Licensee:	Detroit Edison Company
Facility:	Fermi Power Plant, Unit 2
Location:	6400 N. Dixie Hwy Newport, MI 48166
Dates:	July 17 through August 3, 2006
Inspectors:	J. Jacobson, Senior Reactor Inspector B. Jose, Reactor Inspector
Approved by:	D. Hills, Chief Engineering Branch 1 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000341/2006011(DRS); 07/17/2006 - 08/03/2006; Fermi Power Plant, Unit 2; Evaluation of Changes, Tests, or Experiments (10 CFR 50.59) and Permanent Plant Modifications.

The inspection covered a two week announced baseline inspection on evaluations of changes, tests, or experiments and permanent plant modifications. The inspection was conducted by two regional based engineering inspectors.

The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector-Identified and Self-Revealed Findings

None.

B. Licensee-Identified Violations

None.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R02 Evaluations of Changes, Tests, or Experiments (71111.02)

Review of 10 CFR 50.59 Evaluations and Screenings

a. Inspection Scope

From July 17 through August 3, 2006, the inspectors reviewed five evaluations performed pursuant to 10 CFR 50.59. The inspectors confirmed that the evaluations were thorough and that prior NRC approval was obtained as appropriate. The inspectors also reviewed 17 screenings where licensee personnel had determined that a 10 CFR 50.59 evaluation was not necessary. In regard to the changes reviewed where no 10 CFR 50.59 evaluation was performed, the inspectors verified that the changes did not meet the threshold to require a 10 CFR 50.59 evaluation. The evaluations and screenings were chosen based on risk significance, safety significance, and complexity. The list of documents reviewed by the inspectors is included as an attachment to this report.

The inspectors used, in part, Nuclear Energy Institute (NEI) 96-07, "Guidelines for 10 CFR 50.59 Implementation," Revision 1, to determine acceptability of the completed evaluations and screenings. The NEI document was endorsed by the NRC in Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," dated November 2000. The inspectors also consulted Part 9900 of the NRC Inspection Manual, "10 CFR Guidance for 10 CFR 50.59, Changes, Tests, and Experiments."

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17B)

Review of Permanent Plant Modifications

a. Inspection Scope

From July 17 through August 3, 2006, the inspectors reviewed six permanent plant modifications that had been installed in the plant during the last two years. The modifications were chosen based upon risk significance, safety significance, and complexity. The inspectors reviewed the modifications to verify that the completed design changes were in accordance with the specified design requirements, and the licensing bases, and to confirm that the changes did not adversely affect any systems' safety function. Design and post-modification testing aspects were verified to ensure the functionality of the modification, its associated system, and any support systems. The inspectors also verified that the modifications performed did not place the plant in an increased risk configuration.

The inspectors also used applicable industry standards to evaluate acceptability of the modifications. The list of modifications and other documents reviewed by the inspectors is included as an attachment to this report.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems

Routine Review of Condition Reports

a. Inspection Scope

From July 17 through August 3, 2006, the inspectors reviewed six Corrective Action Process documents that identified or were related to permanent plant modifications or evaluations for changes, tests, or experiments issues. The inspectors reviewed these documents to evaluate the effectiveness of corrective actions. In addition, corrective action documents written on issues identified during the inspection were reviewed to verify adequate problem identification. The specific corrective action documents that were sampled and reviewed by the team are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

4OA6 Meetings

Exit Meeting

The inspectors presented the inspection results to Mr. D. Cobb and others of the licensee's staff, on August 3, 2006. Licensee personnel acknowledged the inspection results presented. Licensee personnel were asked to identify any documents, materials, or information provided during the inspection that were considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D.Cobb, Assistant Vice President
K. Hlavaty, Plant Manager
J. Plona, Director, Engineering
A. Lim, Supervisor, Mechanical / Civil
G. DePalma, Supervisor, Electrical / I&C
S. Hassoun, Licensing

Nuclear Regulatory Commission

M. Morris, Senior Resident Inspector
A. Boland, Deputy Director DRS

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None.

Closed

None.

Discussed

None.

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document in this list does not imply NRC acceptance of the document, unless specifically stated in the inspection report.

Condition Reports Generated Due to the Inspection

Number	Title	Date
06-24969	Observation by NRC 50.59 inspection team.	08/01/2006
06-24983	NRC drywell volume configuration control.	08/02/2006
06-25011	Engineering design package completeness.	08/02/2006
06-25030	NRC identified, Evaluation 05-0162, DC - 6258, Volume 1 did not reference bounding evaluation for all electrical components.	08/03/2006
06-25031	Design Modification Process is Cumbersome	8/03/2006

Condition Reports Reviewed During the Inspection

Number	Title	Date
CARD 05-26642	NRC identified issue: SSDPC - 068 - concerns on pre-operational testing adequacy for the EDG starting air system.	11/29/2005
CARD 02-15006	EDG generator bearing temperature concerns.	10/23/2002
CARD 03-12086	Potential Inadequate 50.59 for EDP-29805	05/29/2003
CARD 04-21494	Low Viscosity Oil in EDG #11 Governor	04/02/2004
CARD 04-23785	EDG Governor Runs Hot	08/20/2004
CARD 05-24180	Failure to implement timely corrective actions for fire protection program issues.	07/14/2005

Engineering Design Packages and Change Requests

Number	Title	Revision
EDP - 33790	Revise EDG 11, 12, 13, 14 generator bearing temperature high alarm setpoint and high temperature manual shutdown setpoint.	0
EDP - 33372	Isolation of Main Steam Isolation Valve Leakage Control system.	B
EDP - 33528	EDG Governor Enhancements	0
EDP - 33690	Replacement of Drywell Coolers T4700B003 & B004	0
ECR-33690-1	Replacement of Drywell Cooler Coils	A
EDP - 33565	Replace 50A & 60A fuses with 35A fuses within 4160 V Breaker trip circuits.	0

	operational testing adequacy for the EDG starting air system.	
CARD 02-15006	EDG generator bearing temperature concerns.	10/23/2002
CARD 03-12086	Potential Inadequate 50.59 for EDP-29805	05/29/2003
CARD 04-21494	Low Viscosity Oil in EDG #11 Governor	04/02/2004
CARD 04-23785	EDG Governor Runs Hot	08/20/2004
EDP - 33934	Provide Back Up Nitrogen Bottles to Division II SRVs	0
EDP - 32366	Replace RCIC Pump Minimum Flow Motor Operated Valve	0

10 CFR 50.59 Evaluations

Number	Title	Revision
05-0162	Increase in Switchgear room maximum design temperature from 104°F to 120°F as a result of new post accident peak temperature predicted in DC 6212, Vol. 1, Rev. A.	0
05-0097	Evaluate disassembly of RRS valve internals without the need to offload fuel.	A
05-0492	Accept as-is Potential for EESW Side Plugging of EECW Heat Exchanger	A
04-0631	Procedure Revisions to Provide Operator Actions while N3013-F603 is Leaking resulting in the Closing of N3013-F601	0
04-0120	Moisture Separator Reheater Replacement as Identified in EDP-32641	0

10 CFR 50.59 Screens

Number	Title	Revision
04-0157	Compressed air requirements for Station Blackout event.	0
03-0687	120 Kv Switchyard upgrade.	B
04-0312	Screen for EDP-32836 - Installation of Permanent Drywell shielding.	0
04-0384	Revise the ETAP model to incorporate configuration changes.	0
04-0437	Replace CCHVAC normal air intake and exhaust dampers per EDP-32640, Rev.0.	0
04-0453	Replacement of RHRSW, EDGSW and EESW pumps per ERE-32781, Rev. B	B
04-0496	Modification of isolation valve N3018F609 control logic and valve disc to enhance valve operation per EDP-33247, Rev. 0.	0
04-0498	Replacement of overload heaters in MCC compartments associated with MCC bucket replacement project.	0
04-0515	Revision to procedure 23.316; “RPS 120 V ac and RPS MG sets.”	0
04-0543	Revision to procedure 22.000.04; “Plant shutdown from 25 percent power”.	0
06-0218	Revision to RHR procedure 23.205	0
06-0206	EDG starting air system sizing basis.	0
06-0148	Screen for TSR-34120; “Drywell head lift height”.	0
06-0137	Revise MOV G3352F041 torque/thrust design values in DC-5896, Vol. 1, per TSR-34110.	0

Number	Title	Revision
05-0332	Revision to Procedure 20.127.01; "Loss of Reactor Building Closed Cooling Water System".	0
060025	Modification to the Primary Containment Pneumatic Supply System	0
05-0057	EDG Governor Temperature Reduction Enhancements	0

Equivalent Replacement Evaluations (ERE)

Number	Title	Revision
ERE 34317	ERE for Westinghouse breaker type QCHW1030.	0
ERE 33991	ERE for various Agastat relay types.	A
ERE 33616	ERE for P5001D002 & D003 thermal overload relays.	0

Procedures

Number	Title	Revision
3071-128-EZ-01	Electrical Design Instruction; Power and Control Fuse sizing.	B
20.127.01	Loss of Reactor Building closed cooling water system	26
22.000.04	Plant shutdown from 25% power	52

Calculations

Number	Title	Revision
DC - 213, Vol. 1	Sizing of 130/260V batteries.	Q
DC - 6258, Vol. 1	Division I and II switchgear rooms component operability evaluation at 122°F (50°C)	0
DC - 6212, Vol. 1	Environmental response profiles for areas containing safety related equipment.	A
DC - 3099	Anchor Bolts Assessment - Drywell Coolers	B
DC - 6300, Vol. 1	Seismic Qualification of Drywell Cooling Units T4700B003 & B004	0
DC - 4959, Vol. 1	Locked Valve Program Basis	M
DC - 1368	Qualification of existing support W-C41-2979-G08 for Additional Loads	0
DC - 3365	Re-evaluation of Existing Supports G51-4059-G07, E51-2185-G01 & G02	0

License Change Requests

Number	Title	Revision
LCR 05-018-UFS	Update UFSAR sections to reflect correct cooling capacity of ESF switchgear and battery charger room coolers.	0

Technical Service Requests

Number	Title	Revision
TSR - 34120	Drywell head lift height	0
TSR - 33176	Revise the ETAP model to incorporate configuration changes	0

Industry Standards

Number	Title	Date
IEEE 946-1985	IEEE recommended practice for the design of safety-related DC Auxiliary Power systems for nuclear power generating stations	July, 1985
IEEE 485-1978	IEEE recommended practice for sizing large lead storage batteries for generating stations and substations	Nov. 1978

LIST OF ACRONYMS USED

ADAMS	Agency-Wide Document Access and Management System
ASME	American Society of Mechanical Engineers
CFR	Code of Federal Regulations
CARD	Condition Assessment Resolution Document
DRS	Division of Reactor Safety
EDG	Emergency Diesel Generator
ECR	Engineering Change Request
EDP	Engineering Design Package
EESW	Emergency Service Water
EECW	Emergency Cooling Water
IR	Inspection Report
MCC	Motor Control Center
MOV	Motor Operated Valve
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
PRA	Probabilistic Risk Assessment
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
SRV	Safety Relief Valve
TRM	Technical Requirements Manual
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report