Fermi 2
6400 North Dixie Hwy., Newport, MI 48166

Detroit Edison

March 16, 2006
NRC-06-0016

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington D C 20555

Reference: Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43

Subject: 2005 Annual Reports for Fermi 2

The Fermi 2 Technical Specifications (TS) contains a requirement for submitting a report for safety relief valve challenges (Technical Specification 5.6.6). Enclosure A is provided in accordance with Technical Specification 5.6.6 to meet this requirement.

Enclosure B is attached and contains a report on service life of the main steam bypass lines. This satisfies the commitment stated in Detroit Edison letter to the NRC dated November 7, 1986 (VP-86-0154).

Enclosure C is attached in accordance with 10 CFR 50.46(a)(3)(ii) and contains a report of Emergency Core Cooling System (ECCS) cooling performance evaluation model changes or errors.

Should you have any questions or require additional information, please contact me at (734) 586-5197.

Sincerely,

Ronald W. Gaston
Manager, Nuclear Licensing

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Enclosure A: Safety Relief Valve Challenge Report
Enclosure B: Service Life of Main Steam Bypass Lines
Enclosure C: ECCS Cooling Performance Evaluation Model Changes or Errors

cc: w/Enclosures

D. H. Jaffe
T. J. Kozak
NRC Resident Office
Regional Administrator, Region III
Supervisor, Electric Operators,
Michigan Public Service Commission

ENCLOSURE A

FERMI 2

SAFETY RELIEF VALVE CHALLENGE REPORT

JANUARY 1 - DECEMBER 31, 2005

DETROIT EDISON COMPANY

NRC DOCKET NO. 50-341

FACILITY OPERATING LICENSE NO. NPF-43

Safety Relief Valve Challenges

There were no instances in 2005 where reactor pressure was high enough to require Safety Relief Valve (SRV) actuation. There were no instances in 2005 where an SRV actuation was demanded by an automatic logic system or the valves were cycled for surveillance testing.

ENCLOSURE B

FERMI 2

SERVICE LIFE OF MAIN STEAM BYPASS LINES

JANUARY 1 - DECEMBER 31, 2005

DETROIT EDISON COMPANY

NRC DOCKET NO. 50-341

FACILITY OPERATING LICENSE NO. NPF-43

Service Life of Main Steam Bypass Lines

In accordance with Detroit Edison letter to the NRC dated November 7, 1986 (VP-86-0154), the cumulative time the main steam bypass lines are operated with the bypass valves between 30 percent and 45 percent open will be reported annually. A cumulative value of 100 days is not to be exceeded without prior NRC notification.

Evaluations performed by Stone and Webster and by Hopper and Associates concluded that the bypass lines are acceptable for safe operation when operated within the 100 day constraint. Based on these evaluations, the new main steam bypass piping that was installed in 1985 has a service life that will allow it to function for the life of the plant under anticipated operating conditions. The main steam bypass lines cumulative usage was 40.66 days as of December 31, 2005.

ENCLOSURE C

FERMI 2

ECCS COOLING PERFORMANCE EVALUATION MODEL CHANGES OR ERRORS

JANUARY 1 - DECEMBER 31, 2005

DETROIT EDISON COMPANY

NRC DOCKET NO. 50-341

FACILITY OPERATING LICENSE NO. NPF-43

ECCS Cooling Performance Evaluation Model Changes or Errors

There have been no errors identified since last year's annual report.

The current license basis Peak Clad Temperature (PCT) for Fermi 2 is 1650 degrees Fahrenheit. This is a change from the previous reporting period. Fermi 2 re-analyzed the Loss of Coolant Accident (LOCA) for all fuel currently in the Reactor Pressure Vessel. Two LOCA analyses were performed for General Electric (GE) 11 and GE 14 fuel which also incorporated all error reports. No new error reports have been issued against Fermi 2 since completing the LOCA analysis. There is a 550 degrees Fahrenheit margin to the 2200 degrees Fahrenheit PCT limit given in 10 CFR 50.46.