February 7, 1994

Docket No. 50-341

The Detroit Edison Company ATTN: Mr. Douglas R. Gipson Senior Vice President Nuclear Operations 6400 North Dixie Highway Newport, MI 48166

NRC REGION III AUGMENTED INSPECTION TEAM (AIT) REVIEW OF THE

DECEMBER 25, 1993, FERMI 2 TURBINE-GENERATOR FAILURE

Dear Mr. Gipson:

The enclosed report refers to a special onsite review conducted by an NRC Augmented Inspection Team (AIT) from December 28, 1993, through January 19, 1994. At 1:15 p.m., on December 25, 1993, the Fermi 2 turbine-generator suffered a catastrophic failure causing significant damage to the turbine, generator and exciter. The AIT reviewed the turbine-generator failure and the resultant damage to turbine-generator components and support systems. The AIT also provided independent assessment of liquid and gaseous releases to the environment during and subsequent to the event. The AIT team leader was Mr. Ron Gardner of the Region III office. Team members are identified in the report. The report also refers to the followup activities of your staff and to the discussion of our findings with you and others of your staff at the conclusion of the inspection.

The enclosed copy of our AIT report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

The AIT was formed to gather information on the event. Specifically, the AIT examined DECo's response to the event, previous turbine-generator and support system problems, your plans for determining the root cause of the turbinegenerator failure, and the event's impact, if any, on the plant's reactor, safety systems, and containment.

The event resulted in severe damage to the Fermi 2 turbine-generator system. However, the consequences of the event posed no threat to public health and safety. Gaseous releases that resulted from this event were within the range of normal operations. Liquids in the form of oil and water released to the environment as a result of this event contained no detectable radioactive contamination. Plant personnel, including management, effectively responded to this event by assuring safe reactor shutdown and the suppression and control of the turbine-generator system fire. Some secondary issues were not addressed as effectively as possible; however, these issues had no effect on safe reactor shutdown. In addition, Fermi 2 management demonstrated competent direction and control of event recovery and investigation efforts.

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The root cause of this event and the full extent of damage to the turbinegenerator system has not been determined. Please address your planned actions in these areas in your documented evaluation required by the Confirmatory Action Letter (CAL-3-93-018).

2

Issues identified by the AIT may be examined for possible violation of NRC requirements and regulatory enforcement in subsequent inspections.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC Public Document Room.

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

Sincerely,

original signed by

Edward G. Greenman, Director Division of Reactor Projects

Enclosure: NRC Region III Inspection Report 50-341/93029

See Attached Distribution

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