### Fermi 2 1Q/2003 Plant Inspection Findings

# **Initiating Events**

# **Mitigating Systems**

Significance: Dec 06, 2002

Identified By: NRC Item Type: NCV NonCited Violation

### Failure to Have Adequate Procedures for Alternative Shutdown in Effect

The inspectors identified that the licensee failed to have adequate procedures in effect for alternative shutdown in accordance with their license conditions. Specifically, performance of necessary actions to conduct an alternative shutdown would have required operators to perform steps contrary to the emergency operating procedures. The failure to have adequate procedures in effect for alternative shutdown is a violation of a license condition. This issue was greater than minor because the conflict between procedures could result in operator delay and confusion for performance of necessary alternative shutdown steps. The finding was determined to be of very low safety significance, i.e., Green, because the finding did not affect a fire protection feature and interviews with operators indicated that they would take the necessary actions. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : 2002008(pdf)



Significance: Dec 06, 2002 Identified By: NRC Item Type: NCV NonCited Violation Failure to Take Prompt Corrective Actions to Correct Identified Deficiencies in Alternative Shutdown Procedure

The inspectors identified that the licensee failed to promptly correct identified deficiencies in the alternative shutdown procedure which specified safe shutdown actions to be taken in the event of a fire in an affected fire area. Specifically, the alternative shutdown procedure which specified operator actions in the event of a fire in fire area 11ABE relied upon operator actions to be taken in the same area. As such, operators may not have been able to perform the directed actions due to exposure to the fire, the actions may not have been effective due to fire damage, and the carbon dioxide fire suppression system for the area could have been adversely affected. The failure to take prompt corrective actions is a violation of a license condition. The issue was greater than minor because specified actions may not have been effectively accomplished and a fire protection feature was affected. The finding was determined to be of very low safety significance, i.e., Green, because there were no identified fire damage scenarios which would require alternative shutdown. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : 2002008(pdf)



Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Accomplish Electrical Switching Activities in Accordance With Written Procedural Instructions

A finding of very low significance was identified through a self-revealing event while performing a changeover from the 2B-1 battery charger to the spare 2B1-2 battery charger. This activity was incorrectly accomplished, rendering two emergency diesel generators inoperable for a short period of time. The finding was more than minor in that it affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was screened by the Significance Determination Process and determined to have very low safety significance (Green) because having two of the four emergency diesel generators inoperable for a short duration while the station blackout combustion turbine generator remained operable only produced a very slight increase to the core damage probability. One Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, was identified.

Inspection Report# : 2002007(pdf)



Significance: Sep 30, 2002 Identified By: NRC

Item Type: NCV NonCited Violation

#### **Both Divisions of CCHVAC Inoperable Due to Opening Access Panel**

A finding of very low significance was identified through a self-revealing event when maintenance personnel opened an access panel to repair the control center heating, ventilation and air conditioning return fan bearing. The action of removing the panel decreased control room pressure and rendered both trains of control center heating, ventilation, and air conditioning inoperable for 42 minutes. The finding was more than minor in that the control room envelope was breached and could allow unfiltered radionuclides to enter the control room and cause operator exposures above regulatory limits during an accident. The issue was of very low safety significance because the time both divisions were inoperable, 42 minutes, was considered of short duration and therefore, a low probability event. In addition, had an accident occurred, the open panel could have been closed rapidly. Therefore, the finding was screened by the Significance Determination Process and determined to have very low safety significance (Green). One Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, was identified. Inspection Report# : 2002007(pdf)



Significance: Sep 30, 2002 Identified By: NRC

Item Type: NCV NonCited Violation

### Core Spray Discharge Valves E2150F004B and E2150F005B Open Simultaneously

A finding of very low significance was identified through a self-revealing event when maintenance personnel bypassed the low pressure protection interlock logic for core spray discharge valve E2150F005B, a containment isolation valve, while the reactor was at operating pressure. The maintenance craft opened the valve while E2150F004B, which is upstream of E2150F005B, was open, thereby opening two of the in-line valves which provide high pressure protection for the low pressure core spray system discharge piping. The interlock normally prevents both valves from being opened simultaneously. The primary causes to this event included an inadequate work impact statement, inadequate work instructions, poor communications, and lack of configuration control appropriate to the circumstances. The finding was more than minor because it increased the likelihood of an inter-system loss of coolant accident, which could occur if full reactor pressure over- pressurized the low pressure core spray discharge piping and caused a pipe failure. The issue was of very low safety significance (Green) because of the short duration both valves were opened and because the discharge check valve, E2150F006B, located in the same line between the reactor and valve E2150F005B, remained closed. One Non-Cited violation of NRC requirements was identified.

Inspection Report# : <u>2002007</u>(*pdf*)

# **Barrier Integrity**

**Emergency Preparedness** 

**Occupational Radiation Safety** 

### **Public Radiation Safety**

# **Physical Protection**

## Miscellaneous

Significance: Mar 31, 2003

Identified By: Licensee Item Type: FIN Finding

### Failure of Circulating Water Pump No. 2 Casing Bolts

One Green finding was identified regarding performance issues which resulted in the unexpected failure of circulating water pump No. 2, and an initiating event (a plant scram). The pump diffuser casing bolts were cleaned of rust and reinstalled following preventive maintenance in 2000. Residual rust left on the bolts caused an inadequate torque to be applied to the bolts. After running the pump for about 29 months, the bolts fatigued and failed. The diffuser casing separated from the pump column and struck and damaged the pump shaft on October 2, 2002. These failures led to a loss of condenser vacuum, a turbine trip, and a reactor scram. This finding was more than minor because the failure of the pump caused a plant transient. However, the failure of the pump was of very low risk significance because the condition neither contributed to: (1) the likelihood of a primary or secondary loss of coolant accident initiator, (2) the likelihood of a reactor trip and unavailability of mitigating equipment or loss of mitigating equipment functions, or (3) the increased likelihood of a fire or an internal or external flood. There were no violations of NRC requirements because the pump is a nonsafety-related component and the pump pieces did not impact the operation of safety-related equipment.

Inspection Report# : 2003002(pdf)

Last modified : May 30, 2003