

December 3, 2010

PRELIMINARY NOTIFICATION

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE – PNO-III-10-017

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. Some of the information may not yet be fully verified or evaluated by the Region III staff.

Facility

Fermi Power Plant, Unit 2
Detroit Edison Company
Newport, MI
Docket: 50-341

Licensee Emergency Classification

Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

Subject: Condensate Overflows Into Turbine Building

On December 1, 2010, a drain valve for the condensate filtering system opened unexpectedly allowing water from the condensate system to fill and overflow a tank designed to hold a limited amount of water when the filtering system is being cleaned. Approximately 100,000 gallons of slightly contaminated water went from the tank through piping into portions of the Turbine and Radwaste buildings. The condensate system supplies water to be used in the reactor. The condensate filtering system cleans this water. Fermi Unit 2 was shutdown for a refueling outage when this event occurred. The reactor remains in a safe condition.

A small amount of slightly contaminated water (the licensee approximated this to be 100 gallons) entered Fermi 2's sewage system through a bathroom floor drain in the plant. The sewage system contains holding tanks on the Fermi site before going to the municipal sewage system. The site ensured all sewage flow offsite was stopped to limit the release to the municipal sewage system. After subsequent testing, the licensee detected a small amount of radioactivity in the septic tank onsite, which was well below regulatory limits. (It is important to have regulatory limits on sewage treatment, because the sewage is processed and returned as a water source in the public domain). The plant is performing further evaluation of the onsite sewage system to determine how much radioactivity may have left the site. Based on the amount of radioactivity found in sewage onsite, the radioactivity in the offsite sewage system would be a very small fraction of regulatory limits, and would not pose a threat to public health.

Fermi personnel are continuing to clean the Radwaste and Turbine buildings, and access is not restricted to any plant equipment.

The NRC reviewed the radiological and equipment safety aspects of the situation. Inspectors determined that no safety related equipment was damaged or impacted. There was no health or safety impact to plant workers. Low-level contamination was limited to some of the workers' shoes and outer clothing during the event. An NRC radiation safety inspector, who was already onsite for routine inspections, has been assisting resident inspectors in evaluating the radiological aspects of the situation. The inspectors are reviewing the licensee's follow-up surveys.

This preliminary notification is issued for information only and the NRC will follow up with on-site inspection of the radiological and equipment aspects of this issue.

Region III received initial notification of this occurrence through discussions with the resident inspectors on December 1, 2010. The information presented herein has been discussed with the licensee, and is current as of 12:00 p.m. CST on December 3, 2010.

ADAMS Accession Number: ML103370575

CONTACTS: John Giessner
630-829-9619
John.Giessner@nrc.gov

Billy Dickson
630-829-9827
Billy.Dickson@nrc.gov