PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-13-004

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	Licensee Emergency Classification
Palisades Nuclear Plant	Notification of Unusual Event
Entergy Nuclear Operations, Inc.	Alert
Covert, Michigan	Site Area Emergency
Docket: 05000255	General Emergency
	X Not Applicable

SUBJECT: PALISADES SHUTDOWN DUE TO SAFETY INJECTION REFUELING WATER

STORAGE TANK LEAKAGE

Description: On May 5, 2013, at 0112 EDT Entergy Nuclear Operations Inc. notified the NRC that operators at the Palisades plant began to shut down the reactor due to a leak in the safety injection refueling water storage tank (SIRWT) that exceeded the criteria for plant shutdown.

The SIRWT is not used for daily plant operations. The tank, which contains a minimum of 250,000 gallons, is a source of borated water for activities during refueling outages and supplies the Emergency Core Cooling and the Containment Spray Systems during emergencies.

The operators commenced the plant shutdown after they discovered SIRWT leakage of about 90 gallons per day (gpd) during monitoring of the tank. This exceeded the licensee's self-imposed limit of 34 gpd established for the operability of the tank. The plant also shut down because they reached the 38 gpd commitment limit established in the NRC's confirmatory action letter (CAL EA 12-155; ADAMS # ML12199A409) of July 2012. Part of the CAL required daily monitoring of tank leakage which had recently been around 1 gpd. However, late May 4th, leakage was noted to be coming from around the tank and roof area during daily monitoring. There was no leakage into the control room. About 80 gallons of low radioactivity water spread onto the roof and down roof drains to drains that go to Lake Michigan. The released radioactivity to Lake Michigan is below any regulatory limits and did not impact the safety of plant workers or the public. Currently, the leakage is being collected and measured by the licensee, and is not going to Lake Michigan.

The cause of the change in leakage from 1 gpd to 90 gpd is under investigation.

The plant was shut down safely and remains in a stable condition. There is no threat to public health and safety.

The licensee is investigating the cause of the leak and evaluating what repairs need to be completed prior to restarting the unit. The duration of the shutdown is expected to exceed 72 hours.

The NRC resident inspectors have been monitoring the leakage from the tank since early May of last year, and ensuring that the plant has a plan in case the leakage increased. The resident

inspectors monitored shut down activities. A region-based inspector will be on-site to assist the resident inspectors in reviewing and observing the actions the plant will take to identify and repair the leak.

The State of Michigan has been notified.

The information in this preliminary notification is current as of 11:00 a.m. EDT on May 6, 2013.

This information has been reviewed with plant management.

This preliminary notification is issued for information only.

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