

September 27, 2011

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-11-011

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

Palisades Nuclear Plant
Entergy Nuclear Operations, Inc.
Covert, Michigan
Docket No: 50-255
License No: DPR-20

Licensee Emergency Classification

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

SUBJECT: PALISADES REACTOR TRIP

Brief Description of the Significant Operational Event or Degraded Condition:

At 3:06 p.m. EDT on September 25, 2011, the licensee experienced an automatic reactor trip due to the loss of one of two trains of direct current (DC) power. At the time of the reactor trip, the licensee was working on a DC distribution panel in order to troubleshoot a previously known issue. During the work, a bus bar slipped causing an arc and the loss of one of the two trains of DC power distribution. Each train is comprised of a set of batteries, two chargers, instrumentation, and two inverters. The inverters provide alternating current (AC) power to the preferred AC buses which provide power to control room indications and controls.

In addition to the reactor trip, the loss of the one train of DC power led to a safety injection signal, auxiliary feedwater actuation signal, containment isolation signal, and a main steam isolation signal. The main steam isolation signal caused the condenser to not be available for decay heat removal and for this reason the operators used the Steam Generator Atmospheric Dump Valves to maintain reactor coolant temperature for decay heat removal. The steam released contained very low tritium levels at concentrations far below the regulatory limit allowed for the public. Based on our initial review, systems on the unaffected train worked as designed and the licensee retained all safety functions.

The plant is currently in a stable shutdown condition. The licensee is currently working on restoring the DC train and all other affected equipment to operable status. NRC Resident Inspectors responded to the control room and continue to monitor and assess plant conditions.

Michigan State officials have been informed of the plant shutdown.

NRC Region III will update this PN after plant restart.

Region III received initial notification of this occurrence through the resident inspectors. The information presented herein has been discussed with the licensee, and is current as of September 26, 2011, at 3:00 p.m. (CDT). This preliminary notification is issued for information only and no further action by the staff is anticipated.

ADAMS Accession No ML11269A230

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