

**PRELIMINARY NOTIFICATION- REGION III**

February 18, 2009

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-III-09-001

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region III staff on this date.

**Facility**

Palisades Nuclear Plant  
Entergy Nuclear Operations, Inc.  
Covert, MI  
Docket: 50-255  
License: DPR-20

**Licensee Emergency Classification**

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

**SUBJECT: PALISADES FORCED SHUTDOWN FOR GREATER THAN 72 HOURS TO REPLACE LEAKING CONTROL ROD DRIVE SEALS**

**DESCRIPTION:**

On February 17, 2009, the licensee shut the plant down using normal shutdown procedures due to a leaking Control Rod Drive (CRD) seal.

Over the weekend, prior to the plant shut down, the licensee noted a rapid rate increase on the leak rate for control rod 34, this rapid increase, prior to the shutdown, is indicative of a CRD seal failing. The elevated leakage rate and upward trend prompted a licensee decision to shut down in order to repair the leaking seals.

While limited CRD seal leakage is not unusual for the CRD seal design at Palisades, elevated CRD seal leakage rates and increasing leak-rate trends are indicators of CRD seal degradation. The site has experienced elevated CRD seal leakage rates and increasing leak-rate trends in the past which required similar plant shutdowns.

CRD leakage is routed to the containment sump where it is collected and processed. The leakage creates no unmonitored offsite dose impact nor did the CRD leakage impact safety system performance.

The duration of the shutdown is expected to exceed 72 hours.

The state of Michigan has been informed.

NRC inspectors will continue to monitor the shutdown, repair, and restart activities.

The information in this preliminary notification has been reviewed with licensee management and is current as of 10:00 a.m. on February 18, 2009.

**CONTACTS:**

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