PRELIMINARY NOTIFICATION- REGION III

June 25, 2010

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-10-010

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	**Licensee Emergency Classification**
Palisades Nuclear Plant	___ Notification of Unusual Event
Entergy Nuclear Operations, Inc.	___ Alert
Covert, MI	___ Site Area Emergency
Docket: 50-255	___ General Emergency
License: DPR-20	X Not Applicable

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

DESCRIPTION:

On June 24, 2010, the licensee shut the plant down using normal shutdown procedures due to a leaking Control Rod Drive (CRD) seal.

The licensee noted a rapid rate increase on the leak rate for control rod 22 which was indicative of a CRD seal failing. The elevated leakage rate and upward trend prompted the licensee to shut down the plant in order to repair the leaking seal.

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.

Region III received initial notification of this occurrence by telephone notification to the resident inspectors from the licensee on June 23, 2010. The information in this preliminary notification has been reviewed with licensee management and is current as of 12:10 p.m. (CDT) on June 25, 2010.

ADAMS Accession Number ML101760522.

CONTACTS: John Ellegood 269/764-8971
John Giessner 630/829-9619