

September 1, 2005

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-III-05-012

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**

Dresden, Unit 2  
Exelon Nuclear  
Morris, Illinois  
Docket: 05000237  
License: DPR-19

**Licensee Emergency Classification**

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

SUBJECT: SHUTDOWN EXPECTED TO BE GREATER THAN 72 HOURS TO REPLACE THE UNIT 2 MAIN TRANSFORMER.

DESCRIPTION:

On August 29, 2005, Dresden Nuclear Generating Station Unit 2 initiated a plant shutdown due to high gassing in the main transformer.

On August 28, 2005, the licensee identified that the hydran gas reading for the Unit 2 main transformer had increased from 55 parts per million (PPM) to 125 PPM over a period of several shifts. Hydran gas readings are taken once per shift on this main transformer and the hydran gas reading provides a gross indication of the level of the thermal decomposition of the oil in the transformer. The licensee was concerned about this relatively significant change in the hydran reading over a short period of time. The subsequent hydran gas readings continued to increase over the next two days; accordingly, engineering and operations personnel recommended that the onshift operations crew reduce power by approximately 25 percent if the Total Dissolved Combustible Gas (TDCG), which is a subcomponent of hydran gas, reached a threshold value of greater than 100 PPM over a four hour period. The subsequent four hour gas sample indicated that the TDCG had increased 151 PPM. As a result, the licensee reduced load 25 percent and expected the gassing to stabilize. The TDCG level continued to increase and reached a level of 2729 PPM after the next four hour gas sample.

When the gassing problem persisted during the subsequent load reduction, the licensee initiated a controlled shutdown. On August 30, 2005, the licensee took the turbine offline at 12:12 a.m. and placed the unit in cold shutdown at 10:55 p.m. The licensee plans to replace the main transformer. There is a spare transformer available onsite that was scheduled to be used during the Unit 3 refueling outage in 2006.

The licensee has planned a sixteen day outage to replace the main transformer. As a result of this unplanned Unit 2 outage, the originally planned Unit 3 maintenance outage to replace a degrading reactor recirculation pump seal has been postponed.

Exelon notified the NRC Resident Inspectors of the condition requiring plant shutdown, and the residents were on-site to observe the shutdown. The information presented herein has been discussed with Exelon and is current as of 8:00 a.m. CDT on September 1, 2005. The Resident Inspectors will continue to follow the licensee's actions with respect to these issues.

The State of Illinois has been notified.

ADAMS Accession Number: ML052440245

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