

April 7, 2006

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-III-06-010

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

Exelon Generation Co.
Quad Cities 2
Cordova, IL
Docket: 50-265
License: DPR-30

Licensee Emergency Classification

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

SUBJECT: CRACKING IDENTIFIED IN UNIT 2 STEAM DRYER

DESCRIPTION:

The licensee has identified cracking in the Unit 2 steam dryer during the unit's ongoing refueling outage. The steam dryer is an internal reactor structure designed to remove moisture from steam before it enters the main steam lines to the turbine. The steam dryer was installed in May 2005 as the first steam dryer replacement in a U. S. reactor.

The steam dryers for both Quad Cities units were replaced because of cracking concerns caused by acoustic loading and vibration from operation at Extended Power Uprate power levels. The replacement dryers were designed and constructed to be more robust and resistant to cracking than the previous steam dryers. The Unit 2 steam dryer was also instrumented with several strain gauges, pressure transducers, and accelerometers.

The initial inspection by the licensee revealed one large crack, approximately 5 feet in length, with multiple branches, in the skirt region of the dryer. This crack is currently believed to have been caused by binding difficulties experienced during the initial installation last year, but the root cause evaluation is still in process. The Unit 2 dryer installation lessons learned were incorporated into the Unit 1 steam dryer installation, and no difficulties were experienced with its installation.

The licensee has also identified several smaller cracks of lesser significance on various internal bracing within the dryer. The steam dryer inspection is expected to be completed on April 9.

Evaluations of all of the cracks and indications also are continuing, and the licensee is developing plans to repair the steam dryer. Region III (Chicago) and the NRC Resident Inspectors are monitoring the licensee's activities.

The State of Illinois will be notified. The information in this preliminary notification has been discussed with licensee management.

Region III received initial notification of the steam dryer inspection findings on March 29, 2006, and additional information was provided as the inspection has continued. This information is current as of 1:45 p.m. CDT on April 7, 2006.

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