

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-08-002A

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

Byron Unit 2  
Exelon Generation LLC  
Byron, IL  
Docket: 50-455  
License: NPF-66

Licensee Emergency Classification

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

SUBJECT: UPDATE - BYRON UNIT 2 NOTICE OF UNUSUAL EVENT DUE TO LOSS OF OFFSITE POWER TO VITAL BUSSES

**DESCRIPTION:**

On March 25, 2008, one of the two Byron Unit 2 station auxiliary transformers (SATs) failed due to a Phase C overcurrent condition causing both SATs to electrically isolate and a subsequent loss of power to both Unit 2 vital 4160 VAC busses. Unit 2 remained essentially at full power during the electrical transient. Unit 1 was shut down for a refueling outage and was not affected by the electrical transient.

The licensee declared a Notice of Unusual Event (NOUE) at 6:49 p.m. CDT per Emergency Action Level MU1, "Loss of all offsite power to essential busses for greater than 15 minutes." The Unit 2 safety related electrical busses were initially powered by the Emergency Diesel Generators and were subsequently cross tied to Unit 1's safety related electrical busses. Inspections were conducted on the Unit 2 SATs, 242-1 and 242-2, and identified no technical issues with either SAT. However, some damage was noted on the 4160 VAC bus duct associated with the 242-2 SAT. The licensee isolated the damaged area and is continuing its evaluation of the damage and its investigation of the root and contributing causes of the loss of the electrical transformer.

The licensee restored off site power to SAT 242-1, restored normal electrical power to Unit 2, and exited the NOUE at 11:09 pm on March 27, 2008.

Throughout this event, the NRC resident inspectors continuously monitored the licensee's activities on site and the Regional Incident Response Center was continuously staffed in Monitoring Mode. The NRC exited Monitoring Mode at 11:15 pm on March 27, 2008.

The State of Illinois was informed.

The information in this preliminary notification has been reviewed by the licensee.

This information is current as of 5:00 a.m. CDT on March 28, 2008.

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