PRELIMINARY NOTIFICATION – REGION III

November 27, 2007

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-III-07-014

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**
Byron Unit 1	___ Notification of Unusual Event
Exelon Generation Co.	_X_ Alert
Byron, Illinois	___ Site Area Emergency
Docket: 50-454/50-455	___ General Emergency
License: NPF-37/NPF-66	___ Not Applicable

SUBJECT: NITROGEN LEAK DURING MAINTENANCE

DESCRIPTION:

On November 27, 2007, a nitrogen leak occurred during maintenance work in a portion of the auxiliary building at the Byron Station and workers were evacuated from the two rooms where the leak occurred. The workers were using liquid nitrogen to create a freeze plug on piping in preparation for maintenance on the 1B containment spray room cooler. The 1B containment spray and the 1B residual heat removal pumps were out of service for the maintenance activity.

Both Unit 1 and Unit 2 were operating at full power, and operations were not affected by the room evacuation.

At 9:15 a.m. CST, the licensee declared an alert under its emergency plan because the two auxiliary building rooms were rendered uninhabitable because of decreased oxygen levels. Workers successfully stopped the nitrogen leak and by 9:33 a.m. the oxygen levels had been restored to normal. The alert classification was terminated at 11:03 a.m. No personnel injuries occurred as a result of the leak or evacuation. All times listed are CST.

The NRC resident inspector and a region-based branch chief were onsite and monitored the licensee's activities in response to the nitrogen leak.

The State of Illinois has been notified. The licensee plans to issue a news release on the event. The information in this preliminary notification has been reviewed with licensee management.

Region III (Chicago) was notified of this event by the resident inspector at 9:25 a.m., and the licensee subsequently notified the NRC Operations Center of the alert declaration. This information is current as of 11:15 a.m. on November 27, 2007.

CONTACTS:

Richard Skokowski	Raymond Ng
630/829-9620	815/234-5451