

September 8, 2006

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-06-020

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

Braidwood 1 and 2  
Exelon Generation Co.  
Braceville, Illinois  
Docket: 50-456 and 50-457  
License: NPF-72; NPF-77

Licensee Emergency Classification

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

SUBJECT: NRC'S REVIEW OF EXELON'S PLANS FOR RESUMING RADIOACTIVE DISCHARGES THROUGH THE BRAIDWOOD BLOWDOWN LINE

DESCRIPTION:

Note: This preliminary notification provides additional information on tritium contamination issues which were previously documented in PNO-III-06-015 and five updates to that preliminary notification.

Updated information:

On September 7, 2006, the NRC informed Exelon Nuclear that the Agency has reviewed and has no further questions concerning the company's plans to resume regular liquid radioactive releases from the plant through the blowdown line at the Braidwood Station.

On September 1, Exelon submitted a letter discussing the company's plans to resume regular liquid radioactive discharges at the Braidwood Station in October 2006. The letter discusses actions that Exelon has taken to ensure the integrity of the blowdown line, to minimize potential stresses on the vacuum breaker valves, and to provide early detection of leakage through the valves.

The NRC inspected the actions outlined in the letter. NRC inspectors have observed remediation activities at the plant and reviewed new procedures on the integrated response to any future radioactive leaks at Braidwood. The inspection results indicate that the utility is capable of detecting, assessing and resolving unplanned releases of radioactive material.

NRC resident inspectors and regional staff plan to closely monitor the utility's preparations for normal radioactive releases through the blowdown line and to inspect representative, release activities as they occur.

The utility continues its cleanup and remediation activities. Since the plant stopped its radioactive releases through the blowdown line, tritiated water produced in plant operations had been stored in 20 temporary storage tanks. It has now been processed and stored in permanent tanks for use in plant operations. The temporary tank system has also been

dismantled, and the tanks are undergoing decontamination. Eight of the empty tanks will remain onsite for contingency purposes.

The NRC has also reviewed the utility's plans to discharge about 45,000 gallons of very low-level tritiated water, which was removed from the environment and stored in three 20,000 gallon temporary tanks (bladders) through the blowdown line.

The utility continues to transfer very low-level tritiated water from its recently purchased pond to the blowdown line. The level in the pond is decreasing, and water transfer is planned to continue until the water level in the pond reaches about 7 feet, which represents a reduction of about 7.5 feet from its original level. The reduction in water level is expected to result in a reduction of environmental tritium levels and reduction in the impacted areas.

State, local and federal officials have been informed.

This information has been reviewed by the licensee and is current as of 12:30 p.m. CDT on September 8, 2006.

CONTACTS:

Steven Orth  
630/829-9827

Anne Boland  
630/829-9601

ADAMS DOCUMENT SUBMISSION

Single Document

Originated By Steven Orth	Telephone 630/829-9827	Mail Stop Region III	LAN ID SKO	Date 09/08/06
------------------------------	---------------------------	-------------------------	---------------	------------------

Document No. \_\_\_\_\_  
 Document Title or Accession No. \_\_\_\_\_  
 NRC Preliminary Notification: Braidwood Plan to Resume Routine Effluent Releases

Is this a brief title that can be changed by DPC according to template instructions?  
 Is this an exact title formatted according to template instructions that **should not be** changed by DPC?

**Document AVAILABILITY (select one)**  
 **Publicly Available**  
 (Indicate release date)  
 Immediate Release  
 Normal Release  
 Delay Release Until \_\_\_\_\_  
 \_\_\_\_\_  
 Date

**Non-Publicly Available**

**Document SENSITIVITY (select one)**  
 Sensitive  
 Sensitive-Copyright  
 Non-Sensitive  
 Non-Sensitive Copyright

**Document SECURITY ACCESS LEVEL**  
 Document Processing Center = Owner  
 NRC Users = Viewer  
 Limited Document Security (*Defined by User*) = Viewer  
 \_\_\_\_\_ = Viewer  
 \_\_\_\_\_ = Viewer  
 \_\_\_\_\_ = Viewer

ADAMS Template No.	RIDS Code (if applicable)	Other Identifiers
--------------------	---------------------------	-------------------

**SUNSI Review for Publicly Available Documents ONLY**  
**COMPLETED BY ORIGINATOR:**

SUNSI Review has been completed. Initials \_\_\_\_\_  
 Availability and Sensitivity on this Form 665 are correct. Initials \_\_\_\_\_  
 SUNSI Review has **NOT** been completed (document is **temporarily** profiled as Non-Public) Initials \_\_\_\_\_

**COMPLETED BY PERSON ADDING THE DOCUMENT TO ADAMS**

"SUNSI Review Complete" has been entered into Profile under Keyword Initials \_\_\_\_\_  
**OR**  
 SUNSI Review has **NOT** been completed Initials \_\_\_\_\_  
 "Non-Public Pending Review" has been entered into the Profile under Keyword

**Special Instructions**

---

Submitted By:	Telephone	Mail Stop	LAN ID	Date submitted to DPC
---------------	-----------	-----------	--------	-----------------------