

July 2, 2010

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE – PNO-III-10-012

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.

| | |
|---------------------------|--|
| <u>Facility</u> | <u>Licensee Emergency Classification</u> |
| LaSalle Units 1 and 2 | <input type="checkbox"/> Notification of Unusual Event |
| Exelon Generation Co. | <input type="checkbox"/> Alert |
| Marseilles, IL | <input type="checkbox"/> Site Area Emergency |
| Docket: 50-373 and 50-374 | <input type="checkbox"/> General Emergency |
| License: NPF-11; NPF-18 | <input checked="" type="checkbox"/> Not Applicable |

SUBJECT: LEAKAGE OF TRITIUM FROM ONSITE STORAGE TANK

DESCRIPTION:

On July 1, 2010, Exelon's LaSalle Station informed the resident inspectors and Region III (Chicago) that elevated levels of tritium (the radioactive isotope of hydrogen) had been identified onsite in a berm around the plant's two condensate storage (CY) tanks. Subsequently, the utility took samples from an onsite monitoring well inside the berm which showed tritium concentrations of approximately 700,000 picocuries per liter (pCi/L) immediately adjacent to the Unit-1 tank. No detectable radioactivity was identified during the routine quarterly testing of this well on June 15, 2010.

The elevated tritium appears to be the result of an active leak near the base of the Unit 1 CY tank which holds water for use in the plant. The leaking tank is located above-ground near the center of the plant and sits atop a concrete pedestal.

Other onsite monitoring wells down-gradient of the CY tank have been tested and have not shown detectable radioactivity. There is currently no indication that tritiated water has left the station property and is limited to onsite locations near the leaking tank.

The licensee has commenced actions to transfer water from the tank into temporary storage containers. Following that effort, station personnel will inspect the tank and formulate plans for its repair. The collected water will be processed through the plant's waste processing system. The licensee plans to regularly sample various onsite monitoring points near the CY tank until the leak is isolated.

The NRC resident inspectors and specialists in the NRC's Region III Office in Lisle, Ill., are closely evaluating the situation. Agency resident inspectors, who are stationed at the plant, are verifying that the utility is addressing the source of the leak; reviewing the nature and impact of the leak; and the utility's repair plans. They will continue to monitor the plant's activities. NRC's health physics experts in the regional office are evaluating the radiological and environmental aspects of the leak

The licensee issued a News Release on July 1, 2010 and notified the State of Illinois. The information in this preliminary notification has been reviewed with licensee management and is current as of 10:00 a.m. on July 2, 2010.

CONTACTS:

Wayne Slawinski
630/829-9820

John Cassidy
630/829-9667