

From: Jan Strasma ²³
To: Anne Boland; Geoffrey Grant; James Caldwell; James Lynch; Richard Skokowski;
Roland Lickus; Steven Orth
Date: 12/28/05 2:52PM
Subject: Exelon plans news release to update Braidwood tritium issue

Exelon Generation Co. plans to issue a news release on Thursday with a status update on the offsite tritium contamination at the Braidwood Nuclear Power Station. The news release will discuss a Notice of Violation issued to the company by the Illinois Environmental Protection Agency, the previously reported identification of measureable tritium in one offsite residential drinking water well, and additional sampling results from onsite and offsite monitoring wells recently installed by the company. The utility has also received an extensive inquiry from the Kankakee IL Daily Journal and expects a news story will run later this week.

Jan Strasma
NRC Office of Public Affairs
Region III, Lisle IL
PH630/829-9663
FX630/515-1096
rjs2@nrc.gov

CC: Raeann Shane; Viktoria Mitlyng

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 5
FOIA- 2006-15

C-96

From: Anne Boland
To: John House
Date: 12/29/05 4:42PM
Subject: Fwd: Braidwood Info

Ooops - left you off cc.

Anne T. Boland, Deputy Director
Division of Reactor Safety
NRC Region III
630-829-9701

From: Anne Boland
To: Peter Habighorst
Date: 12/29/05 3:06PM
Subject: Braidwood Info

Per our discussion - the attached should provide you the additional information that you requested. Please recognize that some of it is very preliminary regarding the 1998/2000 spills and the inspection staff will pursue the historical actions in further detail during upcoming inspections.

We also incorporated the new Q&A in the comm plan which should be out shortly.

Let us know if you have any questions.

Anne T. Boland, Deputy Director
Division of Reactor Safety
NRC Region III
630-829-9701

CC: Benny Jose; Geoffrey Grant; James Caldwell; Mark Wilk; Richard Skokowski;
Stephen Klementowicz; Steven West

Additional Braidwood Background Information

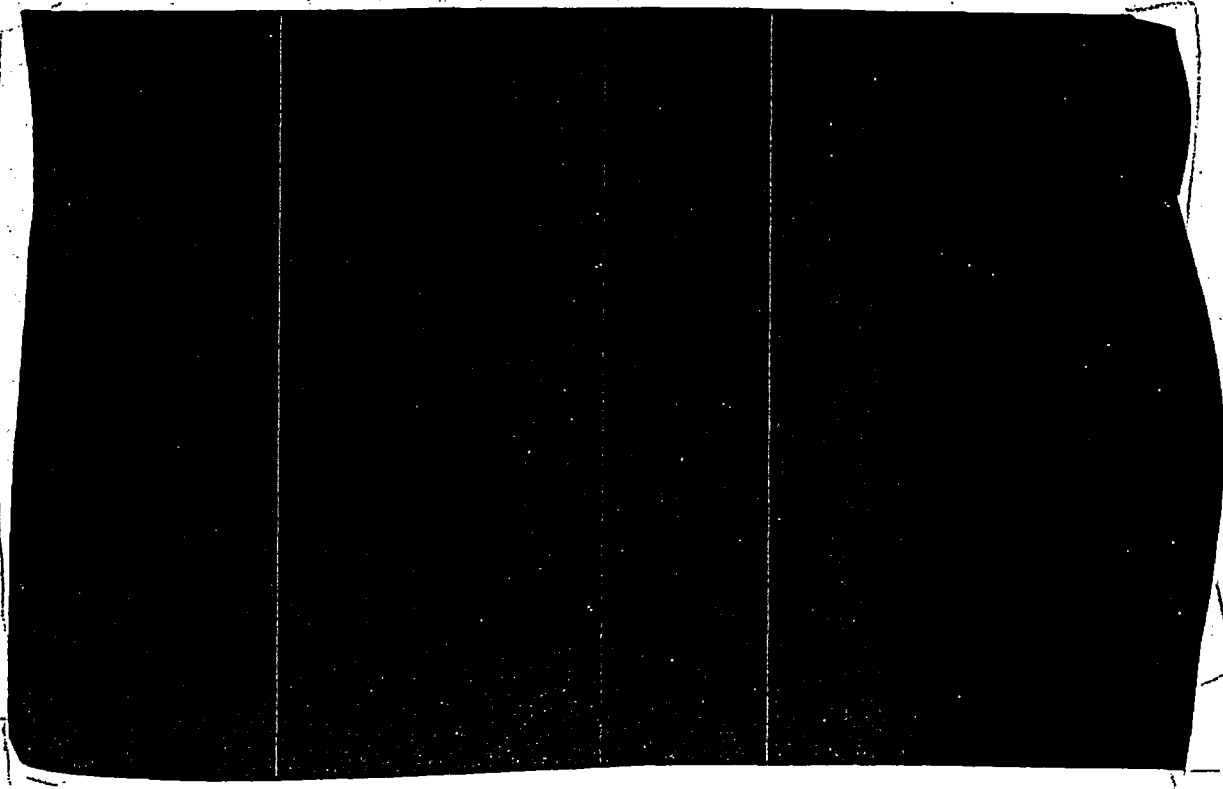
The liquid effluent concentration release limit to the environment for tritium (Part 20, Appendix B) is 1,000,000 picocuries/liter. This is the NRC effluent release concentration limit. The NRC has a dose limit to the public of 100 millirem per year. It would require drinking 2 liters each day (about 730 liters per year) of water with a tritium concentration of 1,000,000 picocuries/liter to reach one-half of the NRC dose limit (50 mrem). In addition to the release concentration limit, there are ALARA dose control values contained in the licensee's Technical Specifications that hold the effluent discharges to Appendix I of Part 50 values. Appendix I states that a licensee is to control radioactive effluents ALARA; for liquid effluents (total) this means they have to keep the annual dose to any member of the public within 3 millirem to the total body or 10 millirem to any organ. In addition, the licensee's technical specifications specify that calendar quarter dose limits for liquid effluents are 1.5 millirem total body and 5 millirem to any organ.

The EPA drinking water limit is 20,000 picocuries/Liter. The EPA has determined that this correlates to a radiological exposure of 4 millirem per year.

The highest tritium concentration seen in a property-owner's well was approximately 1500 picocuries per liter. This is much less than the EPA drinking water standard and the dose to an individual consuming this water would be negligible, about 0.3 millirem using the EPA dose-concentration relationship (note - dose model may be different than NRC's).

There have been no health or safety issues identified at this point as a result of the tritium spill.

Background on Braidwood 1998/2000 Spills (Note: The following information should be considered preliminary as it remains subject to further inspection).



Ex 5

Ex 5