

From: Jan Strasma <sup>R3</sup>  
To: Dave Lochbaum  
Date: Wed, Oct 13, 2004 2:51 PM  
Subject: Re: Dresden pipe leak

Dave -

On August 30, 2004, the Exelon identified through sampling of shallow wells on site at Dresden that there were elevated levels of tritium as high as 9 million picocuries per liter in some locations. Deep well samples (drinking water) were not at elevated levels. Licensee Technical Specifications limit the average annual concentration of tritium released at the site unrestricted area boundary to 10 million pci/l. The source of the leakage was identified as a buried common suction line from the condensate storage tank (CST) to the Unit 2 and 3 High Pressure Coolant Injection (HPCI) systems. Regional health physics specialists have identified that the entire condensate storage tank activity of 9.8 million pci/l could be dumped on the ground without exceeding the technical specification release rate for tritium of 10 million pci/l.

Although the condensate storage tank is the normal source of water to the HPCI systems, the torus is the safety related source of water and the HPCI systems for both units are currently aligned to the torus and isolated from the CST. The licensee started excavating on September 3, 2004, to attempt to identify the exact location of the leak. The licensee has not been able to identify the exact source of the leak. Due to difficulties with excavation near existing equipment and the inability to identify the exact location of the leak the licensee has decided to reroute the piping and abandon portions of the underground piping in place. This activity is currently in progress. Regional health physics specialists have been following the issue from a radiological release standpoint and the resident inspectors have been following the CST/HPCI status and modification (new piping) work. The issue will be reviewed during an inspection scheduled for November and documented in that inspection report.

Jan Strasma

>>> "Dave Lochbaum" <dlochbaum@ucsusa.org> 10/12/04 2:17:00 PM >>>  
Hello Jan:

I'm hearing about a leak of radioactive water from an underground pipe at the Dresden nuclear plant, but cannot find anything about it in NRC inspection reports or licensee event reports.

The leak reportedly comes from the recirculation line from the high pressure coolant injection (HPCI) system to the condensate storage tank (CST). I'm hearing that Exelon found and repaired one leak, but that this one leak was smaller than the calculated leak rate, raising the question of perhaps additional leaks in the same piping.

Please confirm/refute the rumor and point me to any publicly available documentation on it.

Thanks,

Dave Lochbaum  
Nuclear Safety Engineer  
Union of Concerned Scientists  
1707 H Street NW Suite 600  
Washington, DC 20006-3962  
(202) 223-6133 x113  
(202) 223-6162 fax

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