

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Investigation into (1) whether Entergy Nuclear Vermont)
Yankee, LLC, and Entergy Nuclear Operations, Inc.,)
(collectively, "Entergy VY"), should be required to cease)
operations at the Vermont Yankee Nuclear Power Station,)
or take other ameliorative actions, pending completion of)
repairs to stop releases of radionuclides, radioactive)
materials, and, potentially, other non-radioactive materials)
into the environment; (2) whether good cause exists to)
modify or revoke the 30 V.S.A. § 231 Certificate of Public)
Good issued to Entergy VY; and (3) whether any penalties)
should be imposed on Entergy VY for any identified)
violations of Vermont statutes or Board orders related to)
the releases)

Docket No. 7600

SWORN AFFIDAVIT OF JEFFERY A. HARDY

Jeffery A. Hardy, being duly sworn, states as follows:

1. My name is Jeffery A. Hardy.
2. I am employed by Entergy Nuclear Operations, Inc. ("ENO"), at the Vermont Yankee Nuclear Power Station (the "VY Station") as Chemistry Manager.
3. In my capacity as Chemistry Manager, I have personal knowledge regarding (i) the groundwater-monitoring program at the VY Station, (ii) the recent detection of low levels of tritium in groundwater wells GZ-24 and GZ-6, (iii) the efforts of ENO and Entergy Nuclear Vermont Yankee, LLC ("ENVY" and, together with ENO, "Entergy VY") to identify the source of the tritium found in these monitoring wells and (iv) Entergy VY's interactions with government regulators, the Vermont Department of Public Service ("DPS"), the Vermont Department of Health ("DOH") and the U.S. Nuclear Regulatory Commission ("NRC") to identify and address the source of the tritium that has been detected in these wells.

4. Pursuant to the Board's order dated February 7, 2011, I submitted affidavits on February 11, 2011, February 25, 2011, March 11, 2011, March 25, 2011, April 8, 2011 and April 21, 2011 describing Entergy VY's investigation into the source of tritium detected in groundwater monitoring wells GZ-24 and GZ-6. Today's affidavit serves as the next biweekly status update, as ordered by the Board.
5. Tritium levels in samples taken from both groundwater monitoring wells GZ-24 and GZ-6 in the last two weeks have remained below detectable levels. Samples are taken Monday through Friday from both GZ-24 and GZ-6.
6. As described in my affidavit of February 11, 2011, Entergy VY implemented an Action Plan to identify the source of the elevated levels of tritium in groundwater monitoring well GZ-24. As described in my previous affidavits, Entergy VY has identified six lines as potential sources. Five of those six lines have undergone pressure testing. Test results to date do not indicate any gross loss of integrity of the pipes. Entergy VY is currently preparing to conduct confirmatory tracer gas testing on three of the six lines: RW-187 Standby Gas Treatment System Drain Line ("RW-187"), RW-176 1st AOG Delay Pipe Drain Line ("RW-176") and RW-186 Drain Line from the Steam Packing Exhaust ("RW-186").
7. Confirmatory tracer gas testing of RW-187, RW-176 and RW-186 is scheduled to begin with the injection of gas into the pipes during the week of May 23, 2011. In order to conduct the gas tests, Entergy VY will install sample probes, which are composed of a slotted PVC pipe placed into the ground. Entergy VY will then inject gas or gasified liquid into the three pipes. After approximately seven days

during which time the gas will be able to make its way through the pipes, Entergy VY will conduct tests using the sample probes to see if any of the tracer gas can be detected in the soil. A positive result from the soil tests will mean that the pipe may have a loss of integrity allowing the gas to reach the soil.

8. As previously reported, Entergy VY has concluded that isolation of RW-233 Drain Line from AOG Sump ("RW-233"), the sixth line, for the purposes of conducting tracer gas testing or pressure testing is not practical. Because RW-233 is rarely in use and is unnecessary for the operation of the plant, Entergy VY has taken it out of service.
9. Entergy VY continues to provide communications every business day of all applicable sample results to the Department of Public Service, the Vermont Department of Health and the Nuclear Regulatory Commission.
10. Entergy VY also continues to hold weekly, governmental-stakeholder conference calls to provide updates on Entergy VY's investigation progress.

Date: May 6, 2011



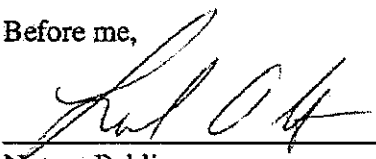
Name: Jeffery A. Hardy
Title: Chemistry Manager

STATE OF VERMONT
COUNTY OF Windham, SS.

On this 6th day of ~~April~~^{May}, 2011, before me, personally appeared Jeffery A. Hardy,
and made oath to the truth of the foregoing on his own personal knowledge.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Before me,



Notary Public

My commission expires: 2/11/15