

**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 and March 25, 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 groundwater monitoring well GZ-24 in the last two weeks have generally been below detectable levels. On two occasions, tritium concentrations in GZ-24 were greater than detectable levels with a peak concentration measuring 1,020pci/L.
6. Tritium levels in samples taken from groundwater monitoring well GZ-6 in the last two weeks have also generally been below detectable levels. On two occasions, tritium concentrations in GZ-6 were greater than detectable levels with a peak concentration measuring 732pci/L. Samples are taken Monday through Friday from both GZ-24 and GZ-6.
7. 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 undergoing preparations with outside experts in order to conduct confirmatory tracer gas testing. The tests are tentatively scheduled for late April into early May.

8. Entergy VY completed a boroscopic inspection and pressure test on the fifth line, RW-187 Standby Gas Treatment System Drain Line ("RW-187") on April 1, 2011. The test results did not indicate any gross loss of integrity of RW-187. Entergy VY is also preparing RW-187 for confirmatory tracer gas testing, which is tentatively scheduled for late April.
9. Entergy VY is continuing to develop an investigation plan for the sixth line, RW-233 Drain Line from AOG Sump ("RW-233"). Currently, Entergy VY is focused on developing a plan to isolate RW-233 in order to allow for gas testing.
10. As stated in my previous affidavits, the modifications to the loop seals located in the lower level of the RadWaste Building have resulted in a decrease of the water level in the piping associated with the loop seals. This will help ensure that standing water is not a contributor to the tritium levels observed in groundwater monitoring well GZ-24.
11. 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.
12. Entergy VY also continues to hold weekly, governmental-stakeholder conference calls to provide updates on Entergy VY's investigation progress.

Date: April 8, 2011



Name: Jeffery A. Hardy
Title: Chemistry Manager

STATE OF VERMONT
COUNTY OF Windham, SS.

On this 8th day of April, 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,

Quentin T Benson

Notary Public

My commission expires: 2-10-2015