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March 28, 2011

Michael J. Colomb
Site Vice President - VY

The Honorable Harry L. Chen, M.D.
Commissioner
Department of Health
108 Cherry Street – P.O. Box 70
Burlington, VT 05402-0070

The Honorable Justin Johnson
Deputy Commissioner
Department of Environmental Conservation
103 South Main Street, One South Building
Waterbury, VT 05671-0401

The Honorable Elizabeth Miller
Commissioner
Department of Public Service
112 State Street, Drawer 20
Montpelier, VT 05620-2601

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STATE OF VERMONT
DEPT OF PUBLIC SERVICE
MONTPELIER, VT
05620-2601

Re: Sampling of the Construction Office Building Well

Dear Commissioners Chen, Miller and Deputy Commissioner Johnson:

I write in response to your letter of March 15, 2011 and to provide further information on Vermont Yankee's plans to conduct further sampling and analysis of the Construction Office Building (COB) well.

Vermont Yankee is evaluating whether the risks of inadvertently contaminating the deeper ground layers outweigh the benefits of taking a sample from the COB well. Paramount to this evaluation is the careful consideration of the facts that (1) none of the samples taken from active drinking water wells both on and off site have shown the presence of tritium and (2) the easterly and upward flow of groundwater at the Vermont Yankee site ensures that tritium will not reach drinking water sources in the deep bedrock to the west of Vermont Yankee as explained below.

Vermont Yankee's overriding concern in developing an adequate sampling plan has been to ensure that the natural protections and contamination barriers present in the ground are not disturbed or harmed, and that tritium is not inadvertently introduced to the deep bedrock groundwater as a result of sampling. Based on analyses and consultation with outside hydrology experts, we have concluded that in addition to an easterly groundwater flow towards the Connecticut River, there exists an upward flow of groundwater from the bedrock to the overburden layer above it. This upward flow

serves as a natural protection or barrier to the bedrock, ensuring that any tritiated water from shallower layers does not flow downward into the bedrock aquifer.

We have also concluded that certain depths inside the well have extremely low hydraulic conductivity. Taking a sample from an area of low hydraulic conductivity requires lowering the pressure in order to draw enough water for sampling. The introduction of such a low pressure area creates the risk that tritiated water located in the shallower depths is suctioned down to the deeper sampling depth, resulting in a test result that is not conclusive as to the contamination of tritium. We believe this is what may have occurred during our last sampling of the COB well in October 2010.

With the above considerations in mind, Vermont Yankee is evaluating a sampling plan developed with the help of its outside hydrology experts. This plan calls for groundwater samples to be drawn at a very low flow rate from a depth that is believed to have relatively better hydraulic conductivity in order to minimize the risk of creating an area of lower pressure that would draw tritiated water from shallower levels deeper into the ground. The plan specifies that the sampling flow rate should mirror the COB well's recharge rate (the rate at which the well naturally replaces pumped groundwater) in order to avoid any inadvertent manipulation of the natural gradients present in the ground. Standard sampling protocol requires us to draw and purge a volume equivalent to three well volumes prior to sampling. Based on the anticipated low recharge rate, we believe that purging and sampling will take approximately sixteen weeks to conduct.

Again, our overriding concern is maintaining the ground's natural balance and protections and avoiding any inadvertent contamination of the bedrock aquifer as a result of sampling. We welcome the opportunity for a meeting with you to discuss these issues. Please know that we are committed to protecting the health and safety of the public and the people at Vermont Yankee, and to that end we welcome your continued cooperation and input.

Best regards,

A handwritten signature in black ink, appearing to read "Michael Colomb", written over a horizontal line.

Michael Colomb
Site Vice President