

March 29, 2010

The Honorable John W. Olver  
United States House of Representatives  
Washington, D.C. 20515

Dear Congressman Olver:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of February 11, 2010, regarding the Vermont Yankee Nuclear Power Station in Brattleboro, Vermont. I want to assure you that the Commission shares your concern and expectation that Entergy Nuclear Operations, Inc. (Entergy) promptly take all appropriate actions to identify and remediate the source of the tritiated water such that there will be no impact on the public health and safety.

Recently, Entergy concluded the excavation had revealed the most probable source of the leak, and that the leakage pathway has been stopped. Entergy is performing additional investigations to identify other potential underground leak sources. The NRC will continue to inspect and monitor the licensee's actions to verify the leak has been stopped and to ensure that there is no public health and safety impact associated with the tritium identified in the groundwater. At this time, tritium has not been identified above minimum detectable levels in any on-site or off-site drinking water sources.

As background information, in early January, upon confirmation of tritium in a monitoring well on site at the Vermont Yankee Nuclear Power Station, the NRC's full-time, on-site resident inspectors immediately began to inspect and monitor the licensee's activities to identify the source of the leak. Additionally, during the week of January 24, 2010, the NRC sent two radiation protection specialists to the site to conduct an inspection of Vermont Yankee's implementation of the nuclear industry's Ground Water Protection Initiative. The inspectors performed inspection activities such as observing the licensee perform groundwater sampling, digging of new wells, and searching for leaks in normally inaccessible areas.

The nuclear industry started the groundwater initiative several years ago specifically in response to tritium found in groundwater. This initiative has led to several successes in discovering and correcting leaks from aboveground tanks and buried piping. The NRC is currently evaluating whether additional actions need to be taken to minimize further the potential for leakage from such sources. As an aside, while we do not currently plan to incorporate the industry's Ground Water Protection Initiative into NRC regulations, the NRC staff also plans to inspect implementation of this initiative at other facilities, as it has at Vermont Yankee, using an NRC procedure developed for this specific purpose.

Once Entergy confirmed positive sample results for tritium from a shallow groundwater monitoring well, it implemented a program to identify the source of the leak. The NRC's resident and regional inspectors are providing oversight of Entergy's actions, which include assessing underground piping on site, inspecting accessible piping systems for leakage, excavating an area to examine underground piping, and installing new groundwater monitoring wells to help pinpoint the potential source, or sources. While the current water samples from the Connecticut River and off-site monitoring locations have not detected any tritium above minimum detectable levels, newly installed on-site groundwater monitoring wells, near the Connecticut River, have had positive sample results for tritium. The NRC anticipated these results as Entergy drilled these wells for the purpose of narrowing down the source of the leak.

Regarding your question about immediate shutdown of Vermont Yankee, the NRC recently received three petitions for enforcement against Vermont Yankee seeking, among other things, the immediate shutdown of the facility until a number of remedial actions are completed. The agency's Petition Review Board determined that there is no immediate health and safety issue that would warrant immediate shutdown, noting the following: the licensee is operating within its license conditions and within NRC regulations; there has been no detectable tritium in the off-site water supply, any drinking water wells, or the Connecticut River; and there is currently no negative environmental impact associated with the tritium leakage.

As a result of events at Vermont Yankee and related issues at other facilities, the Commission wants to ensure that the public fully understands all aspects of the tritium issue. Therefore, the NRC staff is exploring options to conduct one or more public forums in the near term to discuss the tritium issue and hear from the public.

On March 1, 2010, in accordance with the Commission's Enforcement Policy, the NRC issued a Demand for Information to Entergy to provide information under oath in order to determine what, if any, further regulatory actions are necessary in response to recent Entergy findings and actions taken at the Vermont Yankee site. This action was taken in response to the findings of Entergy's own investigation of its communications with the State of Vermont, and the personnel actions taken in response to those findings.

Finally, with regard to Vermont Yankee's license renewal application, the NRC staff's review included several on-site audits of the applicant's supporting documentation and inspections of the applicant's programs described in the license renewal application. The NRC published the results of its safety review in a Safety Evaluation Report. At this time, the Commission cannot comment on the merits of the license renewal application for Vermont Yankee because appeals of initial Atomic Safety and Licensing Board decisions are pending before the Commission in its adjudicatory capacity.

The NRC will continue to keep you and the public informed as these activities continue. If you have additional questions on this matter, please contact me.

Sincerely,

/RA/

Gregory B. Jaczko