

March 29, 2010

The Honorable Deval L. Patrick  
Governor of Massachusetts  
Boston, Massachusetts 02133

Dear Governor Patrick:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of February 9, 2010, regarding the Vermont Yankee Nuclear Power Station in Brattleboro, Vermont. I appreciated the opportunity to discuss the subject with you on February 18, 2010, and your commitment to the citizens of Massachusetts in ensuring that Vermont Yankee Nuclear Power Station meets its health, safety, and environmental obligations. 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. Additionally, during the week of January 24, 2010, 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 at sites. Currently, the NRC is evaluating whether additional actions need to be taken to minimize further the potential for leakage from such sources. I would also like to advise you that Entergy has implemented the industry's Ground Water Protection Initiative at its Pilgrim facility near Plymouth, Massachusetts. The NRC staff plans to inspect implementation of this initiative at Pilgrim, 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 at Vermont Yankee, 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 the wells for the purpose of narrowing down the source of the leak. The NRC expects these findings to assist Entergy in characterizing the nature and source of the tritium contamination as its investigation continues.

As a result of events at Vermont Yankee and related issues at other facilities, including Pilgrim, 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.

Regarding ownership of the Vermont Yankee and Pilgrim facilities, in approving the indirect license transfers from Entergy to Enexus, the NRC staff confirmed during its review that the licensees operating under the new parent company will maintain reasonable assurance that funds will be available to support both continued plant operations and ultimate decommissioning and radiological cleanup of the facilities. Therefore, the NRC believes that the licensee's corrective actions in response to the tritium leakage at Vermont Yankee can be adequately planned and implemented without regard to the proposed indirect license transfers.

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

- 3 -

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