November 9, 2011

The Honorable Edward J. Markey United States House of Representatives Washington, D.C. 20515

Dear Congressman Markey:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of October 21, 2011, which poses several questions regarding potential strontium-90 contamination from the Vermont Yankee Nuclear Power Plant.

The NRC's responses to your questions are enclosed. If you need any additional information, please contact me or Ms. Rebecca Schmidt, Director of the Office of Congressional Affairs, at (301) 415-1776.

Sincerely,

/RA/

Gregory B. Jaczko

Enclosure: As stated

Responses to Questions from Representative Edward J. Markey Letter of October 21, 2011

1. Is it the Commission's view that the statements made by Entergy's Lawrence Smith that "No groundwater sample from any well at Vermont Yankee has ever indicated the presence of strontium-90, or any other isotope other than tritium" and "There is absolutely no evidence to suggest that Vermont Yankee is the source for the strontium-90" in the fish from the Connecticut River," provide a truthful, accurate, and complete representation of the source of the strontium? If so, please provide me with full documentation that establishes the source of the strontium as anything other than releases from Vermont Yankee. If not, why not?

Based on effluent reporting to the NRC, the data indicate that no groundwater sample from wells at Vermont Yankee has ever included the presence of strontium-90 (Sr-90). The licensee has reported to the NRC and made public information regarding past gaseous releases of Sr-90 within legal limits, but river water sampling subsequent to these reported releases to the atmosphere has not detected the presence of Sr-90 in the Connecticut River. Because there are multiple potential sources of Sr-90, including nuclear weapons testing by multiple countries in the middle of the last century, it is very difficult to draw conclusions about the source of any particular Sr-90 contamination that is found in the environment unless there is additional supporting evidence. On this specific point, the Vermont Department of Health (VTDH) on its Web site concludes that "we cannot associate low levels of Sr-90 in fish in the Connecticut River with Vermont Yankee-related radioactive materials without other supporting evidence. Other supporting evidence would include measuring Sr-90 in groundwater samples as well as measuring other nuclear power plant-related radionuclides in both fish and groundwater samples. To date, the Health Department Laboratory has not measured other nuclear power plant-related radionuclides in fish or groundwater samples." The quoted licensee statements in your question are not without foundation based on the above information.

2. Please provide me with all documentation related to any NRC regulatory requirements regarding the veracity of statements that licensees provide to the public and the media. If there are no such requirements, please provide an explanation as to why the NRC is not concerned with the truthfulness of public statements made by licensees.

The NRC's legal authority does not extend to regulating all public statements made by companies that hold NRC licenses. As you noted in your letter, we do require that information provided to the NRC be complete and accurate in all material respects. This does not mean that the agency is unconcerned if licensee statements to the public are misleading or untrue. The NRC believes that all stakeholders involved in NRC-regulated activities should act in an open, honest, and transparent way, just as the agency seeks to do in its own action, and any failure by a licensee to do so could call into question the veracity of licensee information provided to the NRC.

3. The Vermont Department of Health stated that "One finding of (strontium-90) just above the lower limit of detection in one fish sample is notable because it is the first time strontium-90 has been detected in the edible portion of any of the fish samples." How is the NRC addressing the need for more study of the possible role of Vermont Yankee in the strontium-90? If Vermont Yankee is found to be the source of the strontium-90, what will be the consequences imposed by the NRC?

The licensee has found no Sr-90 in groundwater well sampling on site at Vermont Yankee. Further, neither licensee nor VTDH sampling of river water has shown the presence of Sr-90 in the Connecticut River. Finally, NRC analytical methods employ a somewhat different "band of uncertainty" than the VTDH when reviewing the findings of the VTDH fish samples, and, in our opinion, the VTDH results are too close to the level of uncertainty to be considered by themselves a conclusive indication of the presence of Sr-90. When taken together, these factors lead us to conclude that there is no need for further study of possible Sr-90 contamination from Vermont Yankee at this time. The plant will continue its regular effluent monitoring and reporting to the NRC. In the future, should there be an indication of Sr-90 releases above the licensed limits or Sr-90 contamination in the river that is tied to emissions from the plant, the NRC will take action, as appropriate, at that time.