July 29, 2005

The Honorable James M. Jeffords
United States Senate
Washington, D.C. 20510

Dear Senator Jeffords:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am writing in response to your letter of June 22, 2005, regarding a Severity Level III Notice of Violation (NOV) sent to Entergy Nuclear Operations' (Entergy's) Vermont Yankee Nuclear Power Station (Vermont Yankee) on the same date. The NOV related to two fuel rod pieces in the spent fuel pool being in a location, for an extended period, that was different than the location indicated in the records. Your letter expressed concern that, by not issuing a civil penalty in this case, the NRC was sending the wrong message to NRC licensees regarding failure to meet regulatory requirements for nuclear material control and accounting (MC&A).

The NRC is committed to protecting the environment, common defense and security, and public health and safety. In doing so, the NRC remains committed to ensuring that the multiple layers of protection, including MC&A programs, at nuclear facilities are adequately maintained to ensure that nuclear materials are properly accounted for and secure. When violations of these programs do occur, the NRC staff, in accordance with the NRC enforcement process, considers carefully the significance of the violations when determining appropriate enforcement actions.

NRC regulations require significant controls and accounting of nuclear materials at nuclear power plants. NRC nuclear power plant licensees are required to keep records of receipt, shipment, disposal, and inventory of all special nuclear material (SNM) and to perform an annual physical inventory of all SNM, including irradiated nuclear fuel in all forms. This includes fuel rods and fuel pieces, such as the two misplaced fuel pieces at Vermont Yankee.

The NRC considered the MC&A violation at Vermont Yankee to be a significant failure of the licensee's MC&A program. As such, the violation was appropriately characterized at Severity Level III in accordance with the NRC Enforcement Policy. The violation was not considered to be more significant than a Severity Level III because other layers of protection functioned properly (i.e., the two fuel rod pieces were neither missing from the site nor from the spent fuel pool). The MC&A violation that occurred at the Millstone Unit 1 nuclear facility, by contrast, involved two unaccounted for fuel rods that were likely cut up and sent to a low level radioactive waste facility along with irradiated reactor hardware. The NRC classified the Millstone Unit 1 MC&A violation at Severity Level II and imposed a $288,000 civil penalty on June 25, 2002.

In deciding that the MC&A violation at Vermont Yankee did not warrant a civil penalty, the NRC considered the criteria for assessment of a civil penalty in Section VI.C.2 of the NRC Enforcement Policy. The Policy includes factors that are applied to increase or reduce a proposed civil penalty. In the Vermont Yankee case, because the plant had not been the subject of any Severity Level I, II, or III violations within the last 2 years, the NRC considered whether credit was warranted for the licensee's corrective actions. The NRC determined that credit for corrective action was warranted. Entergy's investigation of the missing fuel rod pieces and its physical inspection process of the Vermont Yankee spent fuel pool was thorough and complete. The root cause analysis was evaluated by the NRC and determined to be acceptable. Entergy located the fuel pieces and took corrective action to prevent recurrence through improvements in the MC&A program at Vermont Yankee. As summarized in the NRC June 22, 2005 letter to Entergy transmitting the Notice of Violation, Entergy's primary corrective actions included (1) updating and verifying that the records were accurate for the two fuel pieces, (2) performing a complete physical inventory of all SNM at Vermont Yankee, (3) conducting an Entergy Corporate assessment of the Vermont Yankee MC&A process, (4) revising the Vermont Yankee MC&A procedure, (5) establishing a multi-disciplined team to evaluate and recommend future improvements to Vermont Yankee's MC&A process, and (6) strengthening the licensee's Quality Assurance oversight and assessment of Vermont Yankee's MC&A process. The NRC's decision not to issue a civil penalty in this case was consistent with the agency's Enforcement Policy.

The NRC is taking significant actions to ensure that licensees are meeting MC&A requirements and to communicate new MC&A issues to other NRC licensees. These actions were described in an attachment to a June 7, 2005 letter the Commission sent to several members of the U.S. Congress providing the NRC response to the Government Accounting Office's recommendations regarding control of spent fuel. On June 16, 2005, the NRC sent you a copy of that June 7, 2005 letter and its attachment.

Thank you for your interest in spent fuel MC&A at nuclear power plants. If you have further questions related to this matter, please contact me.

Sincerely,

/RA/

Nils J. Diaz