Docket No.

50-271

Mr. Warren P. Murphy
Senior Vice President, Operations
Vermont Yankee Nuclear Power Corporation
RD 5, Box 169
Ferry Road
Brauleboro, Vermont 05301

Dear Mr. Murphy:

Subject: Inspection No. 50-271/91-23

Thank you for your letter dated November 1, 1991, in response to our letter dated September 13, 1991. I apologize for the delay in responding to your letter.

Your response to the Notice of Violation enclosed with our September 13 letter was acceptable, and we have no further questions at this time. We will review your follow up actions in a future inspection.

In your response to the Notice of Deviation against your training program commitment for personnel involved in the transfer, packaging and transport of radioactive materials, you conclude that you did not deviate from your written commitments made in response to NRC IE Bulletin 79-19. Further, you stated that you believe that your existing training program meets those written commitments. Your response cites several contentions to support your position.

Your first contention is that all personnel were appropriately trained in the required transfer/packaging/transportation related areas at the frequency appropriate to the level of radwaste activities being conducted at your facility. Specifically, you note that your facility was unable to ship radwaste to the commercial burial sites between January 1989 and March 1991, and therefore no training was necessary during 1989 and 1990. From the strict sense of conformance with the intent of the Bulletir we agree with this contention. However, it should be noted that during 1989 and 1990, your staff was preparing radwaste for storage at your Low-Level Waste Storage Pad, and, under the procedures governing the operation of this facility, you were to prepare the material such that it was ready for transport and disposal. As a result, it could be argued that the need for training in the waste burial license requirements, DOT and NRC regulations, and waste minimization techniques remained during this time. Certainly it would have been prudent to have provided such training. Additionally, prior to resuming shipments of radwaste to the burial sites, you did not train all

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appropriate technicians in these areas, but rather spread out the training into July, 1991, while resuming shipments of radwaste in March, 1991.

Your second contention is that the two lesson plans presented in 1991 fully covered the required materials necessary to meet your commitments to training in this area. Review during Inspection No. 91-23 by the inspectors of these two lesson plans, together with the four lesson plans not utilized in 1991, indicated that, in order to fully meet your commitment, all six lesson plans were necessary.

Your third contention is that supervisors tasked with the radwaste duties participated in a full training program conducted off-site by a vendor. A review of your records during Inspection No. 91-23 by the inspectors indicated that the supervisor tasked with reviewing your shipping documentation, the Plant Health Physicist, had not attended any vendor-supplied or licensee training in this area since 1985. It should be noted that this is the same supervisor referred to in your response to the Notice of Violation also enclosed with our September 13, 1991, letter, who you indicate needs to attend "an appropriate training program specific to radwaste shipping and handling, every two calendar years."

Notwithstanding the above, as the intent of IE Bulletin 79-19 is to ensure that radioactive material is shipped in accordance with regulations, and as no actual shipments were made during the period in question, we have decided to withdraw the deviation, and we will modify our records accordingly. Nevertheless, as discussed above, we believe that the need for such recurring training on a specified frequency exists in order to maintain competence in the area and to conform to your operating procedures for interim storage of radioactive material, whether or not actual shipments are being made. We appreciate the commitment made in your November 1, 1991, letter to establish a training matrix that will provide for the appropriate training periodicity. We will examine your implementation of this program during a future inspection.

Thank you for you cooperation in this matter.

Sincerely,

Original Signed By Richard W. Cooper

Richard W. Cooper, II Deputy Director Division of Radiation Safety and Safeguards cc:

J. Weigand, President and Chief Executive Officer

J. Pelletier Vice President, Engineering

D. Reid, Plant Manager

J. DeVincentis, Vice President, Yankee Atomic Electric Company

L. Tremblay, Senior Licensing Engineer, Yankee Atomic Electric Company

J. Gilroy, Director, Vermont Public Interest Research Group, Inc.

G. Iverson, New Hampshire Office of Emergency Management

Chief, Safety Unit, Office of the Attorney General, Commonwealth of Massachusetts

R. McCandless, Vermont Division of Occupational and Radiological Health

R. Gad, Esquire

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Chairman, Board of Selectmen, Town of Vernon

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State of Vermont, SLO Designee

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bcc w/encl:

Region I Docket Room (with concurrences) Management Assistant, DRMA (w/o encl)

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H. Eichenholz, SRI - Vermont Yankee (w/concurrences)

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R. Lobel, OEDO

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RI:DRSS

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Mann/slj 3/ /92

Furia 3/492

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326/92

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# VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

BVY 91-109

ENGINEERING OFFICE 580 MAIN STREET

> CILTON, MARSTIN 1808L776-XTX1

November 1, 1991

U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attn:

Document Control Desk

References:

a) License No. DPR-28 (Docket No. 50-271)

b) Letter, USNRC to VYNPC, Inspection Report 91-23 (NVY 91-176).

dated 9/13/91

Dear Sir:

Subject:

Reply to Inspection Report 91-23, Notice of Violation

and Notice of Deviation

During a routine safety inspection conducted on September 3-6, 1991, a violation of NRC requirements and a deviation from a commitment made to NRC were identified. Our response to these items is provided below.

Reference (b) requested Vermont Yankee to respond within 30 days from the date of the letter transmitting the Notice of Violation and Notice of Deviation. Reference (b) was issued on September 13, 1991, but was not received by Vermont Yankee until October 3, 1991. Based upon these considerations, permission was obtained through Dr. W. Pasciak to provide the requested response within 30 days from the date of letter receipt.

#### VIOLATION

10 CFR 71.5 requires that each licensee who transports or offers for transport licensed material outside the confines of its plant shall comply with the applicable requirements of the regulations appropriate to the mode of transport of DOT in 49 CFR 170 through 189. 49 CFR 172.203 requires in part that the description for a shipment of radioactive material must include the name of each radionuclide in the radioactive material and the activity contained in each package of the shipment.

Contrary to the above, on June 25, 1991, the licensee shipped contaminated equipment as Radioactive Material, to Wyle Laboratories in Huntsville, Alabama, and failed to include Iron-55 (Fe-55) as an isotope on the manifest, or to account for its activity on the manifest. Fe-55 represents approximately 50% of the activity present for this type of shipment based upon the licensee's current scaling factors. In addition, the calculations utilized to determine isotopic activity for the gamma emitting isotopes present in this shipment were based upon plant data that was at least three years out of date, and no longer accurately reflected current plant conditions.

This is a Severity Level IV violation (Supplement V).

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# RESPONSE

The initial error in not listing the Iron-55 (Fe-55) isotope was due to the manual process used to generate the shipping papers. The regular computer process specifically identifies the appropriate isotopes, including the weak gamma emitters such as Fe-55. Additionally, this process is kept up to date with the latest scaling factors. The manual process, on the other hand, was poorly defined with only a general reference to the applicable DOT regulations. Due to an individual weakness in training and experience, the person generating the package was unable to use the computer process and, instead, used this manual one. This, coupled with an inaccurate review, allowed the manifest to go out without the Fe-55 being listed and allowed the use of an out of date list of scaling factors.

A complete review of the shipping papers was performed on September 5, 1991. Corrected, computer generated manifests were sent to the affected laboratory. A careful evaluation of the materials showed the shipment to be well within the previously established controls so no improper preparation, packaging, marking, labelling, placarding, or communicating of hazards occurred, nor was any activity limit exceeded. Additionally, all appropriate personnel in the Radiation Protection Department have been given access to the computer program which is normally used for radioactive shipments to ensure that the computer generated shipping papers are used rather than the manual process.

The shipment procedures will be changed to require the use of the computer process for all applicable shipments and more clearly define the requirements for determining the activity of all isotopes within a shipment. Additionally, the supervisor who is designated as the backup to the Radwaste Assistant will be required to generate a full complement of shipping documents for a shipment, either as a training exercise or as an actual shipment, every quarter. This will be done under the cognizance of the qualified Radwaste Assistant. Such a requirement should adequately maintain the designated support person's skill and knowledge. Finally, the designated reviewer of the shipments (Plant Health Physicist) will be required to attend an appropriate training program specific to radwaste shipping and handling, every two calendar years.

The initial training, procedure changes, and surveillances will be completed by December 31, 1991.

## DEVIATION

NRC IE Bulletin 79-19 requires in part that licensee's provide initial training and periodic retraining in the DOT and NRC regulatory requirements, the waste burial license requirements, and the licensee's instructions and operation procedures for all personnel involved in the transfer, packaging and transport of radioactive material. The licensee committed by letter dated September 26, 1979, to provide training and periodic retraining covering NRC and DOT requirements, and applicable plant procedure requirements for all employees involved in the transfer, packaging and transport of radioactive material. The licensee's Training Department Directive - 3, requires in part that a Training Curriculum Committee (TCC) should convene to affirm the Training Department's

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selection/deselection of tasks for training, determination of training settings, and selection of tasks for entry-level requirements, initial and/or continuing training. The results of the TCC meeting shall be used to update the appropriate task-to-training material cross-reference matrix. The licensee's Radiation Protection Technician Task Tracking Sheet #509, for shipping and receiving radioactive materials requires biennial training in the selection of appropriate containers and packages, and triennial training in surveying a shipment, surveying transport vehicles, and supervising the loading of radioactive materials.

Contrary to the above, the licensee had not conducted all the task training specified since June 1988, and did not have scheduled any additional training in these areas for the remainder of 1991. This exceeds the two and three year commitments the licensee has made in response to NRC IE Bulletin 79-19.

### RESPONSE

IE Bulletin No. 79-19 states in part:

"Provide training and periodic retraining in the DOT and NRC regulatory requirements, the waste burial license requirements, and in your instructions and operating procedures for all personnel involved in the transfer, packaging and transport of radioactive material."

In our response letter dated September 26, 1979, we stated in part:

"Training and periodic retraining covering NRC and DOT requirements, and applicable plant procedure requirements is provided for all employees involved in the transfer, packaging and transport of radioactive material. Records of this training are maintained.

...training and periodic retraining in 1) the waste burial license requirements, and 2) minimizing low level waste will be provided as appropriate."

At that time we did not define a specific cycle for this training. Past practice was to present it on an on-going basis as needed.

Inspection 90-08 noted that no radwaste training specific to the commitment made in the 1979 letter was presented to some of our Technicians for three years. Training previous to that time had been performed for Technicians on an undefined periodic basis. Subsequent to that inspection, we agreed to consider presenting training covering the appropriate subjects during the 1991 training cycle.

in response to inspection 90-08, a Radiation Protection Department supervisor reviewed the Radiation Protection Technician Training Program and identified two lesson plans which covered the Bulletin material and commitment subject areas in detail, and submitted the formal requests for this training. The training was presented to all appropriate technicians prior to September 1991. The training presented fully covered all of the committed areas, including a review of the applicable plant procedures. It should also be noted that, biennially the supervisors tasked with the radwaste duties participate in a full training program conducted offsite by a vendor.

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Prior to this year the retraining subject areas were determined at the beginning of a year based on a needs determination performed by the Radiation Protection and Training Departments. This determination was made based on previous findings, weaknesses noted, recommendations made through the formal feedback process, and the training records of the present Technicians. Additionally, consideration was given to the criticality of the tasks. Since no radwaste shipments were being made in 1989 and 1990, the waste shipment subjects were not considered important for retraining. No specific definition had been made to prescribe the periodicity of training for any subject.

Though this process worked well in meeting the accredited process of training, it did not assure that if commitments were made for specific periods of retraining, that those commitments would be met. To address this issue, meetings were held earlier this year with the Training Department and Radiation Protection Supervision to define the cycles for all task training. These meetings resulted in the formation of a new task matrix which assigned specific retraining cycles for all applicable Technician tasks. This matrix and the process for development was defined in a recently revised Training Department Directive, TDD-3. Because the matrix is all encompassing, it includes all applicable lesson plans, not just the ones appropriate to the training required in our commitment. It should be noted that this matrix is in the developmental stage and is intended to be a beginning point for establishing the appropriate periodicity of subjects which require on-going review. At no time was a commitment made to meet the requirements of this matrix prior to its finalization. The matrix is not expected to be completed until January 1992, at which time we expect to begin the defined cycles.

We have concluded that we did not deviate from any specific commitment made to the NRC, however, we concede that our program did require the clarifications and improvements noted above to ensure that all training commitments are met.

Very truly yours,

Vermont Yankee Nuclear Power Corporation

Warren P. Murphy Senior Vice President, Operations

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USNRC Regional Administrator, Region I USNRC Resident Inspector, VYNPS USNRC Project Manager, VYNPS