July 12, 2005

Mr. Michael Kansler President Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR REQUEST TO AMEND PREVIOUS APPROVALS GRANTED PURSUANT TO 10 CFR 20.2002 - VERMONT YANKEE NUCLEAR POWER STATION (TAC NO. MC5104)

Dear Mr. Kansler:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to Entergy Nuclear Operations, Inc.'s (Entergy's) application dated October 4, 2004, as supplemented on January 17, 2005. The application requests to modify previous approvals granted pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 20.2002 (previously 10 CFR 20.302(a)), for on-site disposal of slightly contaminated material at Vermont Yankee Nuclear Power Station. Specifically, Entergy requested an increase of the current approved annual volume limit of 28.3 cubic meters of soil/sand to a new annual volume limit of 150 cubic meters of soil/sand. In addition, Entergy has requested a one-time approval for on-site disposal of the current backlog inventory of approximately 528 cubic meters of soil/sand.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

/**RA**/

Richard B. Ennis, Senior Project Manager, Section 2 Project Directorate I Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosure: As stated

cc w/encl: See next page

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Vermont Yankee Nuclear Power Station

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UNITED STATES NUCLEAR REGULATORY COMMISSION ENTERGY NUCLEAR OPERATIONS, INC. DOCKET NO. 50-271 VERMONT YANKEE NUCLEAR POWER STATION ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering modifying previous approvals, granted pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 20.2002 (previously 10 CFR 20.302(a)), for on-site disposal of slightly contaminated material at Vermont Yankee Nuclear Power Station (Vermont Yankee), as requested by Entergy Nuclear Operations, Inc. (the licensee). Vermont Yankee is located in Windham County, Vermont. Therefore, as required by 10 CFR 51.21, the NRC is issuing this environmental assessment and finding of no significant impact.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would modify the previously-granted approvals for on-site disposal of slightly contaminated material to increase the current approved annual volume limit of 28.3 cubic meters of soil/sand to a new annual volume limit of 150 cubic meters of soil/sand. In addition, the licensee has requested a one-time approval for on-site disposal of the current backlog inventory of approximately 528 cubic meters of soil/sand.

The proposed action is in accordance with the licensee's application dated October 4, 2004, as supplemented on January 17, 2005.

The Need for the Proposed Action:

The proposed action is needed to dispose of slightly contaminated soil/sand on-site. Current restrictions on the annual volume of slightly contaminated soil/sand that can be disposed on-site, coupled with several plant facility projects in recent years, have resulted in the accumulation of a backlog of slightly contaminated earthen material that is awaiting disposal by land spreading on previously-approved on-site disposal areas. The current approved annual volume limit of 28.3 cubic meters of soil/sand for disposal was based on licensee estimates of soil and sand collected from road and walkway sweepings inside the Protected Area following each year's winter cleanup (i.e., the current annual limit does not account for future site excavation and construction activities).

Environmental Impacts of the Proposed Action:

The NRC has completed its safety evaluation of the proposed action and concludes that the proposed action will be bounded by the conditions for the on-site disposals previously reviewed and approved by the NRC. The staff's safety evaluation will be provided as an enclosure to the letter to the licensee approving the proposed action.

The proposed action will not significantly increase the probability or consequences of accidents. No changes are being made in the types of effluents that may be released off-site. There is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action. The licensee will continue to use the designated and approved areas of its property for disposal. Determination of the radiological dose impact of the new material to be disposed has been made based on the same dose assessment models and pathway assumptions used in previously-approved applications for Vermont Yankee. The NRC staff's review of the proposed action concluded that the bounding dose conditions for the previously-approved materials will not be exceeded. The maximum dose from the radionuclides in the material was determined to

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be less than 1 millirem per year to the maximally exposed individual and less than 5 millirem per year to an inadvertent intruder.

With regard to potential non-radiological impacts, the proposed action does not have a potential to affect any historic sites. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, there are no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Environmental Impacts of the Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no-action" alternative). The environmental impacts of the proposed action and the alternative action are similar. If the proposed action is denied, the licensee may be required to ship the material to an off-site low-level radioactive waste disposal facility. The costs associated with off-site disposal greatly exceed the cost of on-site disposal with no significant benefit to the environment.

Alternative Use of Resources:

The action does not involve the use of any different resources than those previously considered in the Final Environmental Statement for Vermont Yankee.

Agencies and Persons Consulted:

On April 25, 2005, the staff consulted with the Vermont State official, William Sherman, of the Department of Public Service, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated October 4, 2004, as supplemented by letter dated January 17, 2005. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly-available records will be accessible electronically from the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Web site, <u>http://www.nrc.gov/reading-rm/adams.html</u>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to <u>pdr@nrc.gov</u>.

Dated at Rockville, Maryland, this 12th day of July 2005.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard B. Ennis, Senior Project Manager, Section 2 Project Directorate I Division of Licensing Project Management Office of Nuclear Reactor Regulation

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