

November 2, 2005

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

SUBJECT: TRANSMITTAL OF DRAFT SAFETY EVALUATION, REVISION 1 - EXTENDED
POWER UPRATE, VERMONT YANKEE NUCLEAR POWER STATION
(TAC NO. MC0761)

Dear Mr. Kansler:

By application dated September 10, 2003, as supplemented by letters dated October 1, and October 28 (2 letters), 2003, January 31 (2 letters), March 4, May 19, July 2, July 27, July 30, August 12, August 25, September 14, September 15, September 23, September 30 (2 letters), October 5, October 7 (2 letters), December 8, and December 9, 2004, and February 24, March 10, March 24, March 31, April 5, April 22, June 2, August 1, August 4, September 10, September 14, September 18, September 28, October 21 (2 letters), October 26, and October 29, 2005, Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Entergy) submitted a proposed license amendment to the Nuclear Regulatory Commission (NRC) for the Vermont Yankee Nuclear Power Station (VYNPS).

The proposed amendment would allow an increase in the maximum authorized power level for VYNPS from 1593 megawatts thermal (MWt) to 1912 MWt. The proposed increase in power level is considered an extended power uprate (EPU).

Based on review of your letter dated October 29, 2005, the NRC staff has revised the draft safety evaluation (SE), previously issued on October 21, 2005, to denote proprietary information pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.390. Accordingly, the staff has prepared a redacted, publicly-available, non-proprietary version of the draft SE (Enclosure 1). A proprietary version of the draft SE is also enclosed (Enclosure 2). The publicly-available version of the draft SE is available on the NRC's Web site at <http://www.nrc.gov/reading-rm/adams.html> by entering Accession No. ML053010167.

Other than the proprietary markings, the only changes made in the enclosed Revision 1 to the draft SE were some corrections to the scheduled completion dates for several of the items in the table shown in Section 4.0 of the SE and the listing of supplements received after October 17, 2005, in SE Sections 1.1 and 9.0. Since the draft SE has not yet received formal review and concurrence by the NRC staff, further corrections and editorial changes are expected prior to issuance of the final SE.

There are no open items in the draft SE at present. However, the NRC staff notes that there are several issues which may warrant revisions to the draft SE prior to issuance of the final SE. These issues are as follows:

- 1) The NRC staff is evaluating possible changes to SE Sections 2.6.5 and 2.13.1 based on receipt of VYNPS EPU Supplement No. 38, dated October 21, 2005, and Supplement No. 39, dated October 26, 2005. Both of these supplements addressed crediting of containment accident pressure from a risk perspective.
- 2) Based on recent discussions with your staff, it is our understanding that Entergy plans to submit another supplement addressing a new plant modification to the condensate and feedwater system. This issue may impact the current writeup in SE Section 2.5.4.4.
- 3) NRC Region I staff, with support from NRC Headquarters staff, are currently evaluating the direct dose calculation methodology described in the VYNPS Offsite Dose Calculation Manual (ODCM). This issue will be included in an upcoming baseline inspection. The purpose of the ODCM review will be to ensure that the dose to a member of the public meets the Environmental Protection Agency's 25 millirem per year limit specified in Title 40 of the *Code of Federal Regulations* Section 190, and referenced in 10 CFR 20.1301(e), both during current plant operation as well as under EPU conditions. This issue may impact the current writeup in SE Section 2.10.1.

If you have any questions, please contact me at (301) 415-1420.

Sincerely,

/RA/

Richard B. Ennis, Senior Project Manager
Plant Licensing Branch B
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-271

Enclosures: As stated

cc w/ Enclosure 1 only: See next page

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Richard B. Ennis, Senior Project Manager
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Accession Nos.:

Package: ML053010183

Letter: ML053010145

Enclosure 1: ML053010167 (publicly available)

Enclosure 2: ML053010175 (non-publicly available)

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