

May 27, 2004

Mr. Bart Bales
100 River Road
Gill, MA 01376

Dear Mr. Bales:

I am responding on behalf of the Nuclear Regulatory Commission (NRC) to your letter of March 31, 2004. In your letter, you expressed concerns about the proposed power increase for the Vermont Yankee Nuclear Power Station (Vermont Yankee) and your belief that an independent engineering assessment, of the type called for by the Vermont State Senate, should be performed. You also expressed concern about the capacity of the spent fuel pool and the age of the plant.

The primary responsibility of the NRC is to ensure the public health and safety. We consider an extended power uprate to be a significant licensing action. Currently, the NRC staff is in the early stages of the review of the Vermont Yankee power uprate request. As such, we have not reached any conclusions concerning the acceptability of the proposed change. We have taken great care in preparing the proposed technical reviews and inspections regarding the Vermont Yankee power increase in order to ensure that these reviews and inspections will identify and address potential safety concerns for operating the plant at increased power. Our detailed technical review, coupled with the associated program of inspections, will provide us with the information we need to make a decision on the safety of operation of Vermont Yankee at increased power. The NRC will not approve the Vermont Yankee power increase, or any proposed change to any plant license, unless our technical staff can conclude that public health and safety will be assured.

The Vermont State Senate Resolution identifies five specific actions that the State Senate requested be included in an independent engineering assessment. The NRC has carefully considered the request and has concluded that the specific actions requested by the State Senate are already satisfied in one way or another through current or planned NRC processes. The NRC responded to the Vermont Senate by letter dated May 24, 2004. A copy of this letter is attached for your information.

You expressed concerns with Vermont Yankee's storage capacity for spent fuel rods. The maximum number of fuel assemblies that are authorized to be stored in the plant's spent fuel pool are defined in the plant's Technical Specifications. The Technical Specifications are an appendix to the plant operating license. The criteria for limiting the number of assemblies allowed in the spent fuel pool include the ability to safely handle the assemblies, provide adequate heat removal, and ensure that the fuel stored is maintained sufficiently sub-critical. Changes to the Technical Specifications require NRC review and approval before the change can be implemented. These changes are called license amendments.

Vermont Yankee's ability to continue to perform a full-core offload into the spent fuel pool will be shortened by about one year if the power uprate is implemented using Entergy's current plan. If

the power uprate is approved by the NRC, Vermont Yankee will continue to store its spent fuel in accordance with its existing Technical Specifications requirements and NRC guidelines.

You stated your concern that Vermont Yankee is an older plant. Consistent with NRC regulations, Vermont Yankee was granted a 40-year operating license in 1972. NRC requires plant operators to continuously test and monitor the condition of safety equipment and to keep equipment in top condition. NRC has also required licensees to correct design deficiencies that could impact plant safety. While Vermont Yankee has been in operation since 1972, over the years, the licensee has replaced equipment and performed overhauls of other plant equipment. Where appropriate, the licensee has also upgraded or installed new equipment to replace or supplement original systems.

It is also important to note that Vermont Yankee meets current applicable requirements. The NRC frequently updates its regulations as a result of improvements to technology and based on operating experience. When requirements are changed, the NRC applies a rigorous evaluation standard to determine if the safety benefit of the new requirements justifies imposing the changes on existing licensees. For example, Vermont Yankee was designed and constructed based on the proposed General Design Criteria (GDC) published by the Atomic Energy Commission (AEC) in 1967. The final GDC were made a part of the AEC's regulations in 1971. Each plant licensed before the final GDC were formally adopted, including Vermont Yankee, was evaluated by the AEC on a plant-specific basis, and was determined to be safe. The NRC determined that imposing the final GDC on plants with construction permits issued prior to 1971, would provide little or no safety benefit while requiring an extensive commitment of resources. In other cases, the NRC has imposed new regulations on nuclear facilities based on the substantial safety benefit that would be provided (e.g., environmental qualification of electrical equipment).

Thank you for your concern and interest in NRC activities. For current information on the NRC's review of the proposed power uprate, please see the Vermont Yankee webpage on the NRC's website at <http://www.nrc.gov/reactors/plant-specific-items/vermont-yankee-issues.html>.

Sincerely,

/RA/

Cornelius F. Holden, Director
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Enclosure: Letter to the Vermont State Senate

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Cornelius F. Holden, Director
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Enclosure: Letter to the Vermont State Senate

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