

UNITED STATES NUCLEAR REGULATORY COMMISSIONVERMONT YANKEE NUCLEAR POWER CORPORATIONDOCKET NO. 50-271ISSUANCE OF ENVIRONMENTAL ASSESSMENT AND FINDINGNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-28, issued to Vermont Yankee Nuclear Power Corporation (the licensee), for operation of Vermont Yankee Nuclear Power Station.

Identification of Proposed Action: The amendment would consist of changes to the operating license and Technical Specifications (TSs) and would authorize an increase of the storage capacity of the spent fuel pool (SFP) from 2000 fuel assemblies to 2870 fuel assemblies.

The amendment to the TSs is responsive to the licensee's application dated April 25, 1986. The NRC staff has prepared an Environmental Assessment of the Proposed Action, "Environmental Assessment by the Office of Nuclear Reactor Regulation Relating to the Expansion of Spent Fuel Pool, Facility Operating License No. DPR-28, Vermont Yankee Nuclear Power Corporation, Vermont Yankee Nuclear Power Station, Docket No. 50-271."

Summary of Environmental Assessment: The Final Generic Environmental Impact Statement (FGEIS) on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575), Volumes 1-3, concluded that the environmental impact of interim storage of spent fuel was negligible and the cost of the various alternatives reflected the advantage of continued generation of nuclear power with the accompanying spent fuel storage. Because of the differences in SFP

designs, the FGEIC recommended evaluating SFP expansions on a case-by-case basis.

For the Vermont Yankee Nuclear Power Station, the expansion of the storage capacity of the SFP will not create any significant additional radiological effects or non-radiological environmental impacts.

The additional whole body dose that might be received by an individual at the site boundary is less than 0.1 millirem per year; the estimated dose to the population within a 50-mile radius is estimated to be less than 0.1 person-rem per year. These doses are small compared to the fluctuations in the annual dose this population receives from exposure to background radiation. The occupational radiation dose for the proposed operation of the expanded spent fuel pool is estimated to be less than one percent of the total annual occupational radiation exposure for this facility.

The only non-radiological impact affected by the SFP expansion is the waste heat rejected to the Connecticut River. The increase in total plant waste heat is less than 0.1%. There is no significant environmental impact attributable to the waste heat from the plant due to this very small increase.

#### FINDING OF NO SIGNIFICANT IMPACT

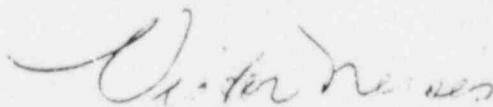
The staff has reviewed the proposed spent fuel pool expansion to the facility relative to the requirements set forth in 10 CFR Part 51. Based on this assessment, the staff concludes that there are no significant radiological or non-radiological impacts associated with the proposed action and that the issuance of the proposed amendment to the license will have no significant impact on the quality of the human environment. Therefore, pursuant to 10 CFR 51.31, an environmental impact statement need not be

prepared for this action.

For further details with respect to this action, see (1) the application for amendment to the Technical Specifications dated April 25, 1986 and additional information provided by the licensee in letters dated August 1, September 26, October 21, November 24, and December 15, 1986, February 25, March 19, March 31, April 9, April 13, May 22, June 11, September 1, and December 11, 1987; and March 2 and June 7, 1988; (2) the FCEIS on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575); (3) the Final Environmental Statement for the Vermont Yankee Nuclear Power Station, July 1972; and (4) the Environmental Assessment dated July 25, 1988. These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555 and at the Brooks Memorial Library, 224 Main Street, Brattleboro, Vermont 05301.

Dated at Rockville, Maryland, this 25<sup>th</sup> day July 1988

FOR THE NUCLEAR REGULATORY COMMISSION



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