

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

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

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

The proposed exemption would grant relief from the technical requirements of Section III.G of Appendix R to Title 10 of the Code of Federal Regulations, Part 50, to the extent that it specifies the separation of certain redundant safe shutdown circuits with fire-rated barriers. Alternatively, the licensee proposes to use fire resistant cables in plant areas on the 280 foot elevation of the Reactor Building.

The proposed exemption is in accordance with the licensee's application dated May 28, 1996, as supplemented by letters dated July 26, 1996, and November 15, 1996.

The Need for the Proposed Action:

The need for this action arises because Paragraph III.G.2.c of Section III.G, "Fire protection of safe shutdown capability," of Appendix R to 10 CFR Part 50, requires:

Enclosure of cable and equipment and associated non-safety circuits of one redundant train in a fire barrier having a 1-hour fire rating. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area.

The licensee requested an exemption from these requirements to allow the use of fire resistant cables instead of enclosing the cables in fire barriers having a 1-hour fire resistance rating. The licensee proposed to use Rockbestos Firezone R Appendix R fireproof cable to control equipment necessary to ensure Reactor Building corner room cooling in the event of a fire in the Cable Vault. An exemption is needed because the Firezone R cables do not meet the literal requirements of the regulation.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed exemption and concludes that the proposed exemption will provide sufficient fire protection and that there is no increase in the risk of fires at the facility. Consequently, the probability of fires has not been increased and the post-fire radiological releases will not be greater than previously determined, nor does the proposed exemption otherwise affect radiological plant effluents.

The change will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed actions involve features located entirely within the restricted area as defined in 10 CFR Part 20. They do not affect nonradiological plant effluents and have no other environmental impact. Accordingly, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed actions.

Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed actions, any alternatives with equal or greater environmental impact need not be evaluated. As an alternative to the proposed actions, the staff considered denial of the proposed actions. Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed actions and the alternative action are similar.

Alternative Use of Resources:

These actions do not involve use of resources not previously considered in the Final Environmental Statement for the Vermont Yankee Nuclear Power Station.

Agencies and Persons Consulted:

In accordance with its stated policy, on April 3, 1997, the staff consulted with the Vermont State official, Mr. William K. Sherman of the Vermont Department of Public Service, regarding the environmental impact of the proposed actions. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

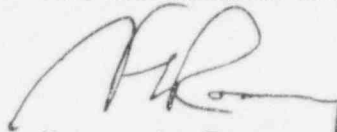
Based upon the environmental assessment, the Commission concludes that the proposed actions will not have a significant effect on the quality of the

human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed exemption.

For further details with respect to the proposed actions, see the application dated May 28, 1996, as supplemented by letters dated July 26, 1996, and November 15, 1996, which are available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Brooks Memorial Library, 224 Main Street, Brattleboro, VT 05301.

Dated at Rockville, Maryland this 28th day of May 1997.

FOR THE NUCLEAR REGULATORY COMMISSION



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