



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 117 TO FACILITY OPERATING LICENSE NO. DPR-28

VERMONT YANKEE NUCLEAR POWER CORPORATION

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

1.0 INTRODUCTION

By letter dated October 16, 1989, the Vermont Yankee Nuclear Power Corporation (the licensee) requested an amendment to Facility Operating License No. DPR-28 for the Vermont Yankee Nuclear Power Station. The proposed amendment would reduce the frequency of fire watches, when required, from continuous to not less than once per hour in the cable vault or switchgear room.

2.0 EVALUATION

The licensee proposes to amend Technical Specification (TS) 3.13.D.2, "High Pressure CO₂ System." This TS provides limiting conditions for operation of this system in the cable vault and switchgear room. The current TS requires a continuous fire watch, should the CO₂ system become inoperable. The proposed amendment would require a one hour fire watch (roving patrol), provided the fire detection system is operable should the CO₂ system become inoperable. The existing TS did not provide any credit for the detection systems in the cable vault and switchgear rooms. These protection systems both provide alarms and actuate the CO₂ systems. These systems alarm locally and remotely in the control room.

Since the current TS was put into effect, the licensee has modified both the cable vault and switchgear rooms by the addition of fire barriers. More importantly, the licensee has added a dedicated safe shutdown system.

We conclude based on the superiority of a detection system with multiple sensor points over a single person on watch, and the capability of the detection system to both reliably alarm and actuate the CO₂ system that inclusion of the detection system in the TS more than compensates for the reduction in frequency from a continuous fire watch to a one hour fire watch. In addition, significant improvements in fire safety, barriers and a dedicated safe shutdown system, further enhance the ability to detect and react to a fire. Therefore, we conclude a one hour fire watch is acceptable for the cable vault and switchgear rooms.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (54 FR 46785) on November 7, 1989 and consulted with the State of Vermont. No public comments were received and the State of Vermont did not have any comments.

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: December 8, 1989