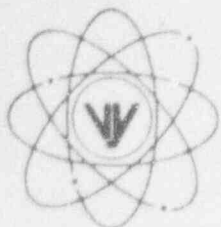


VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

REPLY TO
ENGINEERING OFFICE

580 MAIN STREET
BOLTON, MA 01740
(508) 779-6711

November 7, 1994
BVY 94-109

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

References: a) License No. DPR-28 (Docket No. 50-271)
b) USNRC Information Notice 94-19: Emergency Diesel Generator
Vulnerability to Failure from Cold Fuel Oil, dated 03/16/94

Subject: Proposed Change No. 178, Diesel Fuel Oil System Technical Specification

Pursuant to Section 50.90 of the Commission's Rules and Regulations, Vermont Yankee Nuclear Power Corporation hereby proposes the following changes to Appendix A of the Operating License [Reference (a)].

PROPOSED CHANGE

Replace pages 218, 219, 223 and 243 of the Vermont Yankee Technical Specifications with the attached revised pages 218, 219, 223 and 243.

This proposed change updates the requirements for procurement and testing of diesel fuel oil by using the 1993 version of Standard ASTM D975 and by specifying that the cloud point for the oil be less than the 10th percentile minimum temperatures for the Vermont Yankee site which have been determined using the method specified in Appendix X2 of ASTM D975-93. This change also removes the word "usable" from Section 3.10.C.

REASON FOR CHANGE

The proposed change is requested to improve the reliability of the onsite Emergency Diesel Generators (EDGs) and diesel driven fire pumps by updating the requirements for procurement and testing of diesel fuel oil. Review of diesel generator fuel oil specification and testing requirements during an NRC inspection and review of Reference (b) has determined that Vermont Yankee should update its fuel oil specification to preclude potential problems with diesel fuel oil during extreme cold weather conditions.

140025

9411140130 941107
PDR ADDCK 05000271
P PDR

ADD 1/1

United States Nuclear Regulatory Commission
November 7, 1994
Page 2

BASIS FOR CHANGE

The guidance contained in ASTM D-975-68, cited in the existing Technical Specifications, stipulates that for cold weather operation, the "pour point" for the diesel fuel oil should be 6°C [10°F] below the ambient temperature at which the engine is to be operated. Vermont Yankee's fuel oil is stored outdoors in an unheated tank. The guidance contained in ASTM D-975-93 for cold weather operation is based on "cloud point" and specific regional weather conditions and is considered more appropriate than the older standard.

Guidance contained in ASTM D-975-93 states that satisfactory operation should be achieved if the cloud point is specified at 6°C [10°F] above the 10th percentile minimum temperature for the area in which the fuel is to be used. ASTM D-975-93, Appendix X2 provides values for 10th percentile minimum temperatures for the United States. The "cloud point" is a temperature at which a cloud of wax crystals forms in the fuel oil and the wax crystals start to precipitate. The "cloud point" is generally about 6°C [10°F] above the pour point but the cloud point can actually vary between 3°C to 12°C above the pour point. Vermont Yankee is adopting the more conservative requirement that the cloud point be less than the 10th percentile minimum temperature for our area. This is consistent with the more conservative guidance provided in Federal Fuel Oil Specification VV-F-800b and meets the intent of Regulatory Guide 1.137, "Fuel Oil Systems for Standby Diesel Generators", Revision 1, Section C.2.a. Instead of using the 10th percentile minimum temperature values provided in ASTM D-975-93, Appendix X2, Vermont Yankee shall use specific 10th percentile minimum temperatures developed for the Vermont Yankee site using the method described in Appendix X2.

There are no significant differences between the original requirements and the proposed requirements except for the guidance in procurement of fuel oil for cold weather conditions.

The word "usable" in Section 3.10.C is considered superfluous and potentially misleading. It is being removed because the required quality and quantity of diesel fuel oil is clearly spelled out in the Technical Specification requirements and Bases such that the word is unnecessary. This removal is considered an administrative change.

SAFETY CONSIDERATIONS

The revision of the Technical Specification to update the diesel fuel oil requirements to require that cloud point be less than the 10th percentile minimum temperature for Vermont Yankee will enhance the reliability and availability of the emergency diesel generators and the diesel fire pump by providing additional assurance that the diesel fuel oil systems are not impacted by extreme cold weather conditions.

The change does not impact any FSAR safety analysis or change the function of any equipment. The change has been reviewed by the Plant Operations Review Committee and the Nuclear Safety Audit and Review Committee.

United States Nuclear Regulatory Commission
November 7, 1994
Page 3

SIGNIFICANT HAZARDS CONSIDERATIONS

The standards used to arrive at a determination that a request for amendment involves no significant hazards considerations are included in the Commission's regulations, 10CFR 50.92, which state that the operation of the facility in accordance with the proposed amendment would not:

- involve a significant increase in the probability or consequences of an accident previously evaluated; or
- create the possibility of a new or different kind of accident from any accident previously evaluated; or
- involve a significant reduction in a margin of safety.

The following discussion addresses the proposed changes with respect to each of these three criteria, and demonstrates that the proposed changes do not constitute a significant hazard consideration:

- 1) The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated because the change only affects the specification and testing of diesel fuel oil. The Emergency Diesel Generators (EDGs) and diesel driven fire pump are not accident initiators and the method of procurement or testing of diesel fuel oil cannot initiate an accident. This change to the diesel fuel oil procurement and testing requirements does not impact any FSAR safety analysis. The proposed change will provide additional assurance that the EDGs and diesel driven fire pump are available to mitigate the consequences of accidents previously evaluated. Thus the consequences of an accident previously evaluated are not increased.
- 2) The change does not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change only affects diesel fuel oil procurement and testing and only substitutes a more appropriate specification method for the past practice. This change does not modify any requirement for the operation of the EDGs, diesel driven fire pump or their fuel oil systems and the EDGs and diesel fire pump are still bounded by the assumptions in the accident analysis. The method of procurement and testing provides additional assurance that the diesel fuel oil is available when needed. The proposed change does not involve any changes in Technical Specification setpoints, permanent plant equipment, plant operation, protective functions or design basis of the plant. Therefore, change in the method of procurement and testing of diesel fuel oil would not create a different type of accident than previously evaluated.
- 3) The change does not involve a significant reduction in the margin of safety because this proposed change is being initiated to increase the reliability and availability of the EDGs and diesel driven fire pump, thus enhancing the safety of the plant. No existing safety margins are affected. Assurance that the EDGs and diesel fire pump operate within limits previously determined to be acceptable continues to be provided. Thus, improvement in EDG and diesel fire pump reliability and availability does not involve a reduction in the margin of safety.

Based on the above, Vermont Yankee concludes that the proposed change does not constitute a significant hazards consideration as defined in 10CFR50.92(c).

United States Nuclear Regulatory Commission
November 7, 1994
Page 4

SCHEDULE OF CHANGE

The proposed change will be incorporated into Vermont Yankee Technical Specifications as soon as practicable following receipt of your approval.

We trust that the information provided adequately supports our request, however, should you have any questions on this matter, please do not hesitate to contact us.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORP.



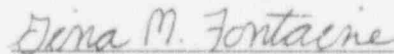
Donald A. Reid
Vice President, Operations

DAR/gmv

cc: USNRC Region I Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager - VYNPS

STATE OF VERMONT)
)ss
WINDHAM COUNTY)

Then personally appeared before me, Donald A. Reid, who, being duly sworn, did state that he is Vice President - Operations, of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing document in the name and on the behalf of Vermont Yankee Nuclear Power Corporation, and that the statements therein are true to the best of his knowledge and belief.



Gina M. Fontaine, Notary Public
My Commission expires February 10, 1995