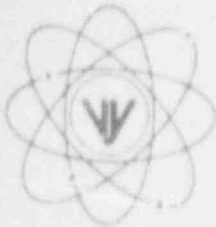


# VERMONT YANKEE NUCLEAR POWER CORPORATION



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ENGINEERING OFFICE

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June 3, 1992  
BVY 92-068

United States Nuclear Regulatory Commission  
Region I Administrator  
475 Allendale Road  
King of Prussia, PA 19406

References: (a) License No. DPR-28 (Docket No. 50-271)  
(b) NRC Memorandum from T.E. Murley, Director, Office of Nuclear Reactor Regulation, "Temporary Waivers of Compliance", dated 2/22/90

Dear Sir:

**Subject: Request for Temporary Waiver of Compliance from Technical Specification LCO Requirements Pertaining to Emergency Diesel Generator**

The purpose of this letter is to document our request, in accordance with the guidance provided in Reference (b), for a temporary waiver of compliance from Technical Specification LCO requirements for Emergency Diesel Generator operability.

1. Requirements to be Waived:

Vermont Yankee Technical Specification 3.5.H.1 states the following:

During any period when one of the standby diesel generators is inoperable, continued reactor operation is permissible only during the succeeding seven days, provided that all of the Low Pressure Core Cooling and Containment Cooling Subsystems connecting to the operable diesel generator shall be operable. If this requirement cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the cold shutdown condition within 24 hours.

Vermont Yankee is requesting relief from the 7-day Limiting Condition for Operation of Section 3.5.H.1 for a period of 1 additional day with an emergency diesel generator (EDG) inoperable. The waiver would extend the available time to replace engine components and thoroughly test the unit prior to a return to operable status.

2. Discussion of Circumstances

The "A" Emergency Diesel Generator was declared inoperable on May 28, 1992 at 1240 pm. During a routine monthly EDG surveillance, a problem was noted with the jacket coolant system and the EDG was therefore declared inoperable pending investigation into the cause of the abnormalities. Upon disassembly of the diesel engine, the #7 cylinder liner was found to have

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a crack. In addition, further inspection revealed plating damage of the liner and pitting damage of the upper piston in the #3 cylinder. These indications were in the combustion area and not in the piston wear ring area.

Both liners and the #3 piston will be replaced.

3. Compensatory Actions

As required by Technical Specifications, the alternate EDG was satisfactorily tested and all of the Low Pressure Core Cooling and Containment Cooling Subsystems connected to this operable EDG were verified as operable. Additionally, the Vernon Hydro Station was notified of this situation and the dedicated tie-line to Vermont Yankee was verified as being available. The Station Manager concurred with our request not to do anything that would jeopardize the tie-line availability as well as to notify Vermont Yankee of any change in the tie-line status.

It should be noted that use of the Vernon tie-line is addressed in operating procedures and operators are trained in its use.

A thorough review of all planned surveillance activities was conducted and only those determined to be of low risk will be allowed. Based upon the short duration of this request, additional alternate testing of the "B" EDG and its subsystems was considered, and determined not to be necessary.

4. Safety Significance and Potential Consequences

The proposed one day extension has no impact on the consequences of any previously analyzed event if off-site power remains available. The alternate EDG was tested for operability prior to requesting the one-day extension period. This gives assurance that the available EDG would function, if required. In addition, the Vernon tie-line, which has historically demonstrated a very high reliability, is available to supply power to the emergency bus. The requirements of the Technical Specifications also require that during the one-day extension period, all remaining Low Pressure Core Cooling and Containment Cooling systems connected to the operable EDG will remain operable. The proposed change would allow the "A" EDG to remain inoperable for one additional day. Any accident which could occur during this one-day period could have occurred in the previous seven-day period also. Therefore, the proposed change does not significantly increase the probability of an accident. Since this is an extension of only one day, the increased risk associated with an accident during this period is not significant. Probabilistic Risk Analysis has estimated that the impact on the expected core damage frequency would be changed by less than 1 percent during the additional one-day extension period.

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5. Duration of Request

The proposed waiver of compliance is for one-time approval of reactor operation for up to eight (8) days with the EDG inoperable. The current Vermont Yankee Technical Specifications allow reactor operation for seven (7) days with the EDG inoperable. Vermont Yankee believes that the additional one day will provide sufficient margin to repair and thoroughly test the EDG without compromising the continued safe operation of the plant. It should be noted that a significant portion of the extra LCO time would be for "run-in" of the new components and operability testing. The EDG would be available during this period, but not considered operable.

6. Significant Hazards Consideration

Vermont Yankee has concluded that the request does not involve a significant hazards consideration in that the request would not:

- (i) involve a significant increase in the probability or consequences of an accident previously evaluated. As discussed in section 4, a one (1) day extension to an already existing seven (7) day Limiting Condition for Operation would involve an insignificant increase in the probability of occurrence and consequences of a design basis accident during the extension period.
- (ii) create the possibility of a new or different kind of accident from those previously evaluated. The proposed change can have no impact on the possibility of a new or different initiating event. Any previously analyzed event postulated during the one-day extension period can be mitigated by the systems powered by the Vernon tie-line.
- (iii) involve a significant reduction in the margin of safety. As discussed above, approval of this request involves an insignificant reduction in the margin of safety because of the availability of other plant electrical systems and the short duration of the extension period. The change will have no significant impact on the consequences of any accident and will have no impact on any protective boundary.

In summary, the waiver of compliance would provide a non-recurring, one-time approval of reactor operation for up to an additional day with the "A" EDG inoperable. The waiver of compliance would extend the existing Technical Specification LCO through June 5, 1992 at 1240 pm. The waiver of compliance will allow an additional one day to repair components and thoroughly test the EDG prior to returning it to service.

The Vermont Yankee Plant Operations Review Committee (PORC) has reviewed this request for a temporary waiver of compliance and concurs with the determinations presented.

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7. Environmental Consequences

No environmental consequences will result from approval of this request.

8. Notification of State

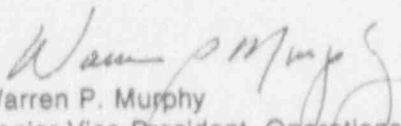
Vermont Yankee has notified the State of Vermont of the content of this request and has forwarded a copy of this document to the Vermont State Nuclear Engineer.

It is our understanding that this request for a one-day temporary waiver of compliance has been authorized by telecon on June 3, 1992 by James C. Linville (USNRC) to Donald A. Reid (VYNPC).

We trust that the information provided adequately supports our request; however should you have any questions regarding this matter, please contact this office.

Very truly yours,

Vermont Yankee Nuclear Power Corporation

  
Warren P. Murphy  
Senior Vice President, Operations

cc: USNRC Document Control Desk  
USNRC Director, NRR  
USNRC Director, Reactor Projects, NRR  
USNRC Director, Office of Enforcement  
USNRC Technical Assistant, Reactor Projects, NRR  
USNRC Resident Inspector (VYNPC)  
USNRC Project Manager, NRR  
VT Department of Public Service