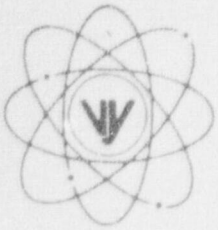


VERMONT YANKEE NUCLEAR POWER CORPORATION



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REPLY TO
ENGINEERING OFFICE
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BOLTON, MA 01740
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October 11, 1994
BVY 94-100

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

Subject: Vermont Yankee Nuclear Power Corporation, 10 CFR50 Appendix "R" Lighting Issue

This letter is submitted to transmit a Summary Report related to the 10CFR50 Appendix "R" lighting issue recently discovered at Vermont Yankee. The report describes the condition and provides information related to the cause of the event and proposed corrective actions and schedule. The event was the subject of discussions with the NRC and is provided in response to a verbal request for additional information by Mr. James Linville.

Should you require additional information, please contact us.

Sincerely,

Vermont Yankee Nuclear Power Corporation

Donald A. Reid
Vice President, Operations

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

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**Vermont Yankee Summary Report
Appendix "R" Lighting Issue**

Description of Condition and Events:

10CFR50, Appendix "R", Section III J requires that emergency lighting units with at least an 8-hour battery power supply be provided in all areas needed for operation of safe shutdown equipment and in access and egress routes thereto. On 10/4/94, following a review of design changes, licensing documents and the Safe Shutdown Capability Analysis (SSCA) it was concluded that we were not in full compliance with Appendix "R". A listing of the areas that do not fully meet the requirement is included in the attachment. This condition was discovered during an investigation resulting from a Plant Operating Review Committee (PORC) follow item which was generated during a review of the Vermont Yankee Alternate Cooling System operating procedure. The Alternate Cooling System is relied on in the event of loss of the Vernon Pond or in response to an Intake Structure fire.

Vermont Yankee has 47 battery powered 8-hour rated emergency light units installed which are designated for Appendix "R" purposes. These lights are configured to illuminate the access and egress paths to the key plant areas and equipment used to shutdown the plant if the control room required evacuation. In addition, there are approximately 90 other battery powered 8-hour units installed which are not specifically designated for Appendix "R" purposes. These units supplement other emergency lighting which include lighting powered from the diesel generators and from the station batteries.

Since the plant was in hot shutdown at the time the condition was identified, it was determined that resolution was required prior to re-start of the plant.

The following short term actions were taken:

- The condition was verbally reported and discussed with the NRC (10/4/94).
- A PRO was generated and Operations Department Management and Control Room personnel were made aware of the condition (10/4/94).
- Dedicated emergency lighting equipment (battery powered lanterns) were made available, and appropriate administrative controls were put in place as an interim compensatory measure (10/5/94).
- A Task team consisting of Engineering and Operations personnel was assembled to review the related procedures. It was concluded that existing procedures and training are adequate to achieve safe shutdown in the event of a fire in any plant fire area (10/5/94).
- The PRO was evaluated and the event was determined to be reportable under 10CFR50.72(b)(1)(ii)B and 10CFR 50.73 (a)(2)(ii)B. A one hour notification was made to the NRC at 12:38 hours on 10/5/94. A Licensee Event Report is being prepared and will be submitted by 11/4/94.
- A Plant Operating Review Committee (PORC) meeting was held and the lighting and procedural aspects were reviewed. It was concluded that the compensatory measures and administrative controls put in place satisfied the safety intent of 10CFR50 Appendix "R".

Cause of Event:

A formal root cause evaluation will be performed in conjunction with preparation of the Licensee Event Report (LER) to be submitted for this event.

Long Term Corrective Actions:

1. The condition will be resolved for the various areas by one or a combination of the following actions:
 - A. Adding battery powered emergency lighting units to illuminate the area (forecast for completion by 12/31/94 for areas accessible during power operation and prior to startup following the 1995 outage for areas not accessible during power operation).
 - B. Redesignating other existing emergency lighting units that already provide appropriate coverage, and meet the governing requirements, as Appendix "R" lighting units (forecast for completion by 11/30/94).
 - C. Requesting an exemption in accordance with the provisions of 10CFR50 Appendix "R" or providing additional clarification for current compliance with Appendix R (forecast for completion by 12/31/94).
2. Other corrective actions will be considered and specified as necessary, upon completion of the root cause analysis.

ATTACHMENT: Areas Requiring Appendix "R" Lighting

Areas Requiring Appendix R Lighting

Plant Location	Specific Device(s)	Compliance Measure
West Cooling Tower*	NW Pit (SW-11,16A,17)	A or C
	Tower Top (Dist Tray) (SW-17A,B,C,D)	A or C
Torus Area Valves*	SW-13A	A,B or C
	SW-13B	A,B or C
	SW-16B	A,B or C
	SW-18	A,B or C
	SW-19A	A,B or C
	SW-19B	A,B or C
	SW-20	A,B or C
	SW-29	A,B or C
	SW-36A	A,B or C
	SW-36B	A,B or C
	SW-184	A,B or C
	SW-203	A,B or C
	SW-206	A,B or C
	RCW-24A	A,B or C
	RCW-24B	A,B or C
	RCW-28	A,B or C
	RCW-28A	A,B or C
	RCW-29A	A,B or C
RCW-32A	A,B or C	
RCW-32B	A,B or C	
A EDG Room*(1)	MCC 9C	A
	FCV-28A	A or B
B EDG Room*(1)	MCC-8C	A
	FCV-28B	A
A EDG Day Tank Room	LCV-2A	A,B or C
B EDG Day Tank Room	LCV-2B	A,B or C
Fuel Oil Transfer Pumps (Back-up Portable Config)	AOG/TB Walkway	A or C
	FO Strg Bldg Pit	A or C
	CST Elec. Outlet	C

*Alternate Cooling System

(1) Required for Alt Clg and Other Function

Plant Location	Specific Device(s)	Compliance Measure
NE Corner Room (A-EDG) *	RHR-23A	A and B
	RSW-42A	A and B
	RSW-69A	A and B
	RHRSW Motor Clg.	A and B
SE Corner Room (B-EDG) *	RHR-23B	A and B
	RSW-42B	A and B
	RSW-69B	A and B
	RHRSW Motor Clg.	A and B
RB Elev. 252' Steam Tunnel	RCIC-20	A or C
	RCIC-21	A or C
	RCIC-30	A or C
RB Elev. 252'	X105C	A or B
	RHR-17	A
RB Elev. 280'	CS-11A	A and/or B
	CS-11B	A and/or B
	CS-12A	A and/or B
	CS-12B	A and/or B

*Alternate Cooling System