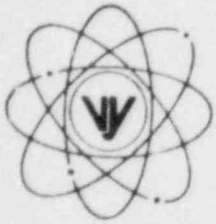


VERMONT YANKEE NUCLEAR POWER CORPORATION

FVY 84-70



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

REPLY TO:

ENGINEERING OFFICE

1671 WORCESTER ROAD
FRAMINGHAM, MASSACHUSETTS 01701
TELEPHONE 617-872-8100

June 29, 1984

U.S. Nuclear Regulatory Commission
Office of Inspection & Enforcement
Region I
631 Park Avenue
King of Prussia, PA 19406

Attention: Dr. Thomas E. Murley
Regional Administrator

Reference: a) License No. DPR-28 (Docket No. 50-271)

Dear Sir:

Subject: Notification of the Potential Existence of a Defect
in Accordance with 10CFR21.21

In accordance with the provisions of 10CFR Part 21, Section 21, we are hereby notifying you that we have obtained information reasonably indicating that a defect may exist with respect to Uninterruptible Power Supply (UPS) batteries supplied to us by Exide Corporation.

Enclosure I to this letter documents the details of this notification and our plans for corrective actions. Should you have any questions regarding this matter, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Warren P. Murphy
Vice President and
Manager of Operations

WPM/dm

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PDR ADOCK 05000271
S PDR

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VERMONT YANKEE NUCLEAR POWER CORPORATION

- cc: (3) USNRC
Director, Office of Inspection & Enforcement
Washington, D.C. 20555
- (3) USNRC
Director, Office of Management
Information and Program Control
Washington, D.C. 20555
- (3) Chairman, Vermont Yankee Nuclear
Safety Audit and Review Committee
- (1) Manager, Operational Quality
Assurance Department
Yankee Atomic Electric Company
- (1) Institute of Nuclear Power Operations (INPO)

EXIDE CORPORATION E SIZE UPS BATTERY PART 21 REPORT

COMPANY INFORMING
THE COMMISSION

Vermont Yankee Nuclear Power Corporation
RD #5, Box 169
Ferry Road
Brattleboro, Vermont 05301

FACILITY EXPERIENCING
PROBLEM

Vermont Yankee Nuclear Power Station
PO Box 157
Governor Hunt Road
Vernon, Vermont 05354

FIRM SUPPLYING
COMPONENT

Exide Corporation
101 Gilbralter Road
Horsham, Pennsylvania 19044

NATURE OF DEFECT

Exide Corporation representatives have performed a detailed field inspection of the Vermont Yankee UPS batteries on March 28, 1984. The results of the inspection indicate that cracked boss seals found on many cells are a result of "nodular corrosion" of the lead posts. This corrosion can cause additional stress on the plastic components of the cover and may expose the copper insert inside the battery posts to the acid, resulting in copper contamination of the negative plates. This contamination indicates that the current carrying capability of the battery posts is degrading, and that the cells are approaching an advanced end-of-life state.

DATE ON WHICH
DEFECT WAS
DETECTED

The problem was initially discovered during the March 28 inspection. By letter dated May 14, 1984, Exide provided additional details and recommendations to Vermont Yankee. Exide determined that the present batteries could still perform their safety function, but Exide strongly recommended replacement of the batteries during the 1984 refueling outage. In subsequent conversations with Exide, the manufacturer stated that the batteries were deteriorating and that they could not guarantee that the batteries could perform the safety function up to the 1985 outage.

NUMBER OF COMPONENTS
AT THE FACILITY

Vermont Yankee has two redundant UPS batteries, each consisting of 192 "E" size cells, Type EC11 purchased around 1979.

CORRECTIVE ACTION
TAKEN

Vermont Yankee has agreed to purchase two 192 cell replacement batteries utilizing a new seal design. These batteries are being replaced during the current 1984 refueling outage.

ADVICE RELATED TO

We recommended that any nuclear installation which currently utilized an "E" size Exide battery inspect the seal area for the type of sealing method and any cracking or negative plate discoloration.