VERMONT YANKEE NUCLEAR POWER CORPORATION



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

FVY 86-20

REPLY TO

ENGINEERING OFFICE

1671 WORCESTER ROAD FRAMINGHAM, MASSACHUSETTS 01701

TELEPHONE 817-872-8100

March 10, 1986

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

References:

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

Dear Sir:

Subject:

Notification of 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 indicating that a defect may exist with respect to SLC squib valve tirgger assemblies manufactured by Conax Corporation.

Enclosure I to this letter documents the details of this notification. 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

/dm

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- cc: (3) U.S. Nuclear Regulatory Commission
 Director, Office of Inspection & Enforcement
 Washington, D.C. 20555
 - (3) Chairman, Vermont Yankee Nuclear Safety Audit and Review Committee
 - (1) Manager, Operational Quality Assurance Dept. Yankee Atomic Electric Company
 - (1) Institute of Nuclear Power Operations (INPO)

SLC SQUIB VALVE TRIGGER ASSEMBLY PART 21 REPORT

COMPANY INFORMING THE COMMISSION Vermont Yankee Nuclear Power Corporation RD 5, Box 169 Ferry Road Brattleboro, Vermont 05301

FACILITY

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

FIRM SUPPLYING COMPONENT

Conax Corporation 2300 Walden Avenue Buffalo, New York 14225

NATURE OF DEFECT

Following routine surveillance testing on February 6 and 11, 1986, during which Vermont Yankee's Standby Liquid Control (SLC) System squib valve failed to fire, Vermont Yankee identified that trigger assemblies supplied by Conax Corporation had two different pin to coil configurations. This failure to fire occurred despite indication via the continuity test circuit that continuity was present.

Discrepancies were identified between Conax manufacturing drawings and the wiring configuration of trigger assemblies in stock at Vermont Yankee. According to the Conax drawing, bridge wires were supposed to be wired across Pins 1 and 4 with the second bridge across Pins 2 and 3. Testing of pin assemblies of the units currently installed at Vermont Yankee determined that there was a bridge wire across Pins 1 and 2 with the second bridge across Pins 3 and 4. Testing of pin assemblies purchased before and after pin assemblies currently installed at Vermont Yankee determined that they had bridge wire connections across Pins 1, 4 and 2, 3.

During a meeting with Conax on February 19, 1986, it was learned that there should only be one pin configuration with the correct configuration having bridges across Pins 1, 4 and 2,,3. Conax felt that the cause of the problem (Units with two different pin configurations) was the

moving of their manufacturing operations to Florida. From approximately mid-1983 to near the end of 1985, Conax had primer trigger assemblies manufactured at their Florida plant. Conax has since moved these manufacturing operations back to Buffalo, New York.

DATE ON WHICH DEFECT WAS DETECTED

A potentia? Part 21 Report Evaluation was initiated on February 14, 1986.

NUMBER OF COMPONENTS AT FACILITY Vermont Yankee had six (6) trigger assemblies with incorrect pin to coil wiring configurations.

CORRECTIVE ACTIONS

- Vermont Yankee is modifying its procedures to require a pin to pin continuity check for all trigger assemblies prior to installation.
- Vermont Yankee is modifying its existing procedure which tests the first primer of each batch to require the testing to be performed in the firing circuit.
- Vermont Yankee is investigating the possibility of revising the continuity test circuit design to ensure it actually indicates ability to "fire" the squib charge.
- Incorrectly wired trigger assemblies are being returned to Conax Corporation for replacement.
- The surveillance test performed which uncovered this problem will be repeated prior to declaring the system operable.

RELATED ADVICE

Vermont Yankee recommends other BWR operators review in detail USNRC IE Information Notice No. 86-13, "Standby Liquid Control Squib Valves Failure to Fire" issued February 21, 1986.

Vermont Yankee also warns BWR operators that, although our wiring did not agree with our wiring diagrams, the as-found wiring was acceptable per General Electric SIL No. 186 issued July 30, 1976. Accordingly, compliance with this SIL does not alleviate the concern Vermont Yankee has identified.