Docket No. 50-271

Mr. L. A. Tremblay Senior Licensing Engineer Vermont Yankee Nuclear Power Corporation 580 Main Street Bolton, Massachusetts 01740-1398

Dear Mr. Tremblay:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING AMENDMENT TO FACILITY OPERATING LICENSE NO. DPR-28 - VERMONT YANKEE NUCLEAR POWER STATION

By letter dated December 23, 1991, you requested a change to the Technical Specification (TS) surveillance and calibration requirements in Table 4.2.2 to refelct the replacement of existing (mechanically-actuated) differential pressure switches with analog loop instrumentation for Primary Containment Isolation System (PCIS).

The surveillance and calibration requirements would be modified to agree with those which previously had been approved for similar analog instrumentation in use at Vermont Yankee.

The Analog Transmitter Trip System (ATTS) replaces the mechanically-actuated sensor. The ATTS system includes an electronic sensor which measures the parameter and converts it to an analog signal that inputs to a Master Trip and Alarm Unit (MTU). At a given setpoint, the MTU either energizes or deenergizes a relay (TR). The TR relay contacts replace the old mechanically-actuated sensor contacts in the logic circuits; however, the TR relay has been the subject of misapplication, inadequate design, and limited service life as identified in 10 CFR 50.73 and 10 CFR 21 reports, information notices, and meetings. Therefore, we request additional information to complete our review of the proposed TS change. This requested information is enclosed.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P. L. 96-511.

Sincerely, Original signed by

Patrick M. Sears, Project Manager Project Directorate I-3 Division of Reactor Projects I/II Office of Nuclear Reactor Regulation

Enclosure: As stated
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VERMONT NUCLEAR POWER STATION

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DOCKET NO. 50-271

The Analog Transmitter Trip System (ATTS) replaces the mechanically-actuated sensor. The ATTS system includes an electronic sensor which measures the parameter and converts it to an analog signal that inputs a Master Trip and Alarm Unit (MTU). At a given setpoint, the MTU either energizes or deenergizes a relay (TR). The TR relay contacts replace the old mechanically-actuated sensor contacts in the logic circuits. The ATTS systems have been added to 5, stems identified by the following correspondence.

- Letter from J. P. Pelletier, VP, VY to NRC, BVY 91-120, to NRC "Proposed Change No. 165 to Reflect Analog System Replacement," December 23, 1991.
- Letter from W.P. Johnson, VP, Vermont Yankee Nuclear Power Commation (VY) to NRC, WVY 80-49, "Recirculation Fump Trip/Analog Trip Symm," March 17, 1980.
- Letter from L.H. Heidar, VP VY, to NRC, FVY 83-1, VY "Analog Trip System and Scram Discharge System Modifications." January 10, 1983.
- 4. Letter from W.P. Murphy, VP, VY to NRC, FVY 86-80, "Changes to Technical Specification to Reflect Analog Equipment Replacement and Administrative Changes" for Emergency Core Cooling System [ECCS], August 26, 1986.

TR relay has been the subject of risapplication, inadequate design, and limited service life as identified in 10 CFR 50.73 and 10 CFR 21 reports, information notices, and meetings. Therefore, we request additional information to complete our review of the proposed TS change.

- Identify the systems and numbers of TP relays that are normally energized.
- 2. Identify the TR relay vendor, style and model number.
- 3. Identify the years of service life for the normally energized TR relays.
- 4. If the service life is known, have the previously installed normally energized TR relays been replaced in a timely manner? Does the licensee have a program for routine relay replacement?
- 5. Describe the method of seismic restraint of the TR relay to its base. Is the restraint used, a wire or a strap?
- 6. Are there any TR relays used in circuits where 24 milli-ampere or less is continually conducted through its contacts?

Mr. L. A. Tremblay, Senior Licensing Engineer

cc: Mr. J. Gary Weigand President & Chief Executive Officer Vermont Yankee Nuclear Power Corp. R.D. 5, Box 169 Ferry Road Brattleboro, Vermort 05301

Mr. John DeVincentis, Vice President Yankee Atomic Electric Company 580 Main Street Bolton, Massachusetts 01740-1398

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Mr. W. P. Murphy, Senior Vice President, Operations Vermont Yankee Nuclear Power Corporation R.D. 5, Box 169 Ferry Road Brattleboro, Vermont 05301

Mr. Richard F. Cedano, Commissioner Vermont Department of Public Service 120 State Street, 3rd Floor Montpelier, Vermont 05602

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Mr. James Pelletier Vice President - Engineering Vermont Yankee Nuclear Power Corp. P. O. Box 169, Ferry Road Brattleboro, Vermont 05301

Resident Inspector Vermont Yankee Nuclear Power Station U.S. Nuclear Regulatory Commission P. O. Box 176 Vernon, Vermont 05354

Chief, Safety Unit Office of the Attorney General One Ashburton Place, 19th Floor Boston, Massachusetts 02108

Mr. David Rodham, Director Massachusetts Civil Defense Agency 400 Worcester Road P.O. Box 1496 Framingham, Massachusetts 01701-0317 ATTN: James Muckerheide DISTRIBUTION W/ENCLOSURE : Central Files - Docket 50-271

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