

NORTHEAST UTILITIES

THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

August 27, 1990

Docket No. 50-423

B13621

Re: 10CFR21

Mr. Thomas T. Martin
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Dear Mr. Martin:

Millstone Nuclear Power Station, Unit No. 3
Report of Substantial Safety Hazard
Westinghouse Veritrek Transmitters

In conformance with 10CFR21, Northeast Nuclear Energy Company (NNECO) hereby provides notification of a Substantial Safety Hazard (SSH) at the Millstone Unit No. 3 plant.

Mr. L. Vogel of the NRC Region I Office was verbally notified August 24, 1990 of two Veritrek transmitters which, based upon responses during calibration and special test, were determined to have excessive output shifts relative to changes in ambient temperature. These problems were identified during routine surveillance.

The following information applicable to this SSH is provided as outlined by 10CFR21.21(b)(3) i through viii:

(i) Name and Address of Individual Informing the Commission

E. J. Mroczka, Senior Vice President, Northeast Nuclear Energy Company, P. O. Box 270, Hartford, Connecticut 06141-0270.

(ii) Identification of Basic Component

Westinghouse Veritrek Transmitter Model Number: 76DP2

(iii) Identification of Firm Supplying the Basic Component

The supplier of the subject transmitters was Westinghouse Electric Corporation, Water Reactor Divisions, Box 355, Pittsburgh, PA 15230-0355. However, Westinghouse has sold this line of transmitters to Tobar, Inc., 1441 West Alameda Drive, Tempe, AZ 85282.

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(iv) Nature of Failure and Safety Hazard Created

While attempting to calibrate two transmitters, an apparent large shift in output was observed when the transmitters' covers were removed or replaced. In evaluating the response of these two transmitters, it was determined that replacement was required due to the observed changes in output with cover removal and replacement.

Following removal, one of the two defective transmitters was subjected to a screening test which determined that there was a significant change in transmitter output corresponding to changes in temperature effects.

As a result of temperature effect problems identified at Public Service of New Hampshire's Seabrook facility in 1986, and reported to the NRC via 10CFR50.55(e),⁽¹⁾ Westinghouse conducted extensive testing on the transmitter and modified the "allowable Temperature Compensation value" to ensure operability of the transmitters. However, even with these new values, it can reasonably be expected that these two transmitters would not have performed as specified.

These transmitters provide input to the reactor trip and engineered safety features actuation logic. The trip setpoints for the above are based on the maximum assumed error (including errors due to temperature affects) plus a margin. The excessive ambient temperature calibration shifts could create a condition that would violate allowable technical specification limits.

(v) Date on which Information of Failures was Obtained

NNECO completed a substantial safety hazard (SSH) review on August 22, 1990, and determined that the defect constituted an SSH and was reportable under 10CFR21.

(vi) Number and Location of all Veritrek Transmitters

There are nineteen Veritrek transmitters installed at Millstone Unit No. 3 to monitor parameters such as steam generator level and reactor coolant system pressure.

An internal review has been performed and it has been determined that these transmitters are not utilized in any of Northeast Utilities' other nuclear units.

(1) J. DeVincentis (PSNH) letter to R. W. Starostecki, "Interim 10CFR50.55(e) Report: Pressure Transmitters," dated April 10, 1986.

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(vii) Corrective Action, Responsible Organization

The two defective transmitters were replaced with similar units from spares. The two spares were checked prior to installation for temperature sensitivity and found to meet manufacturers specifications.

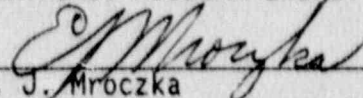
(viii) Advice Related to Failure Given to Licensees

Not applicable--refers to suppliers.

I trust this fulfills our reporting obligations in accordance with 10CFR21 and is fully responsive to your needs for such information.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY


E. J. Mroczka
Senior Vice President

cc: T. E. Murley, Director, Office of Nuclear Reactor Regulation
D. H. Jaffe, VRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2,
and 3
A. Vogel, Reactor Engineer, NRC Region 1

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