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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March 20,1987

Docket No. 50-336
A06372
Re: Region I Inspection

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Response to Region I Inspection No. 50-336/86-23

In a letter dated February 13, 1987[1], Northeast Nuclear Energy Company (NNECO) was requested to review the administrative controls governing electrical work practices and use of electrical wiring diagrams that were involved in the reactor trips and normal AC power losses described in Section 7 of Reference (1). A response was to be submitted within 30 days of receipt of Reference (1) outlining the planned corrective measures. NNECO is hereby submitting the requested information.

Item b. (1) - Unit 2 - Loss of Normal Power - Actuation of Engineered Safety Feature

A normal AC power loss occurred on November 5, 1986 that resulted from the failure to follow a procedural caution, during the reinstallation of a protective relay following annual maintenance.

NNECO Response:

A review of this particular event was conducted by the responsible department to clarify the basis for the specific procedural caution and to emphasize in general the importance of all procedural cautions and notes.

Item b. (2) - Partial Loss of Normal Power - November 29

The partial loss of normal AC power on November 29, 1986 and the reactor trip from 50% power on December 23, 1986 both resulted from an electrical bus potential monitoring transformer drawer

(1) E.C. Wenzinger letter to E.J. Mroczka, "Routine Inspection 50-245/86-22, 50-336/86-23 (11/4/86 to 1/5/87)," dated February 13, 1987.

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not being properly installed. The improper installation caused a misalignment of the drawer making it susceptible to minor bumps or movements that could cause it to briefly interrupt its sensing signal.

NNECO Response:

The procedure that controls and directs periodic maintenance on this type of electrical switchgear, MP 2720C6, has been revised to add a section describing the method for ensuring proper installation of the potential transformer drawer.

Item b. (3) - Unit 2 Trip from 50% Power - December 23

The reactor trip from 100% power on January 2, 1987 resulted from the failure to perform a routine voltage check for verification of expected polarity during installation of a temporary power jumper wire as part of an equipment modification effort.

NNECO Response:

A drawing package had been issued to direct installation and rewiring in panel C26, the Fire Zone Alarm Panel. The drawing in use had been revised to indicate the latest before-work schematic arrangement but did not depict actual physical location of components relative to each other. The rewiring required the placement of a temporary jumper wire between a fuse and a terminal point within panel C26. This same procedure, using the same drawings, had been used the previous working day with no problems. A voltage check of the two points being jumpered was made before the jumper installation, thereby suggesting the drawings represented the actual physical orientation. On the day of the incident the jumper wire was added without the precautionary voltage check, on the assumption that the drawing represented the same type of configuration as that of the previous day. This assumption was incorrect, allowing the jumper to cause the short, which initiated the events resulting in the reactor trip.

Station personnel involved in electrical work of this nature with modifications to existing circuits have been instructed on the importance of performing precautionary voltage checks for both personal safety and plant reliability reasons. The addition of drawings or information to drawing packages to clarify details on physical orientation is being reviewed by the appropriate design groups.

It is NNECO's position that the above steps will prevent a recurrence of the type of events described above. This completes our planned actions regarding the issues raised in the subject inspection report.

We trust that the above information is responsive to your request.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E.J. Mroczka
Senior Vice President

cc: Dr. T.E. Murley, Region I Administrator
D.H. Jaffe, NRC Project Manager, Millstone Unit No. 2
T. Rebelowski, Resident Inspector, Millstone Unit Nos. 1 & 2