HORTHEAST UTILITIES

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Docket No. 50-423 Re: 10CFR50.37 June 10, 1992 MP-92-623

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

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3 Malfunctioning Loose Parts Monitoring System

This Special Report update is being submitted to update a Special Report submitted pursuant to Millstone Unit 3 Technical Specification 3.3.3.8.a, Loose Parts Detection System. Plant Technical Specification 3.3.3.8.a requires that a Special Report be submitted to the NRC 10 days following one or more channels of the Loose Parts Detection System being declared inoperable for more than 30 days while in Mode 1 (Power Operation) or Mcd-2 (Startup). This update provides additional information to the March 13, 1992 submittal. The expected response date was May 29, 1992. Actual submittal was delayed due to verification of surveillance data taken during the recent plant start-up. This delay was discussed with members of your staff.

On February 4, 1992, at 1057 hours, with the plant entering Mode 2 (Startup), at 3% power, 2250 psia and 558 degrees Fahrenheit, the Loose Parts Monitoring System (LPM) was declared inoperable per plant Technical Specifications based on low level alarms on all channels.

Loose parts impacts in the Reactor Coolant System (RCS) are detected by accelerometers attached to major RCS components. An impact generates a signal from one or more accelerometers, which triggers a High Alarm annunciation on the Main Control Board. The High Alarm signal causes information to be recorded from 12 channels onto a computer disk. Low Alarm setpoints are used to detect and annunciate channel failures.

Low alarms have not been functional since February 4, 1992. These are only used to detect failures or degradation in the monitoring channels. These circuits have been checked and 9 of the 12 channels have not failed. All functional channels have been surveilled and considered capable of detecting loose parts. The following measures have been established to verify channel operability. Disks will be analyzed for degradation or failure on a monthly frequency. Continuity checks of LPM cables to verify no open, grounded, or shorted circuits exist will be performed on a monthly frequency. These compensatory measures are in addition to normal surveillances.

Although the loose parts monitoring system has been considered administratively inoperable, the system has remained capable of detecting and recording impact on the RCS in 3 of the 4 Steam Generators and the Reactor Vessel.

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Three channels were inoperable from February 4, 1992. Channel 3 on the Reactor Vessel Head and channel 6 on the Steam Generator B lower level were returned to service during a cold shutdown starting on May 15, 1992. Channel 10 Steam Generator B upper level remains inoperable due to a damaged cable in containment. This cable is not readily available. The replacement of the cable for channel 10 will be scheduled for the next cold shutdown outage of sufficient duration after receipt of the cable.

We anticipate that efforts to restore the low alarm capability to ensure early detection of instrument failures will be successful by the end of June.

This Special Report will be updated by December 1, 1992.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Stephen E Scace
Director, Millstone Station

SES:ljs

cc: T. T. Martin, Region I Administrator

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