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The Northeast Utilities System

DEC 27 2000

Docket Nos. 50-245 50-336 50-423 B18286

RE: 10 CFR 50 Appendix E

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3
Notification of Changes to Emergency Response Data System

The purpose of this letter is to inform the Nuclear Regulatory Commission (NRC) of hardware and software changes that affect the transmission format and computer communication protocol of the Millstone Nuclear Power Station Emergency Response Data System (ERDS). The ERDS provides a direct near real-time electronic data link between Millstone Unit Nos. 2 and 3 onsite computer systems and the NRC Operations Center (Millstone Unit No. 1 is being decommissioned and therefore its data link has been terminated) for the automated transmission of a limited data set of selected parameters. As currently designed, the Millstone ERDS transmits ten snapshots of required data across this data link every five minutes. As a result of hardware and software changes to the ERDS, data transmission across this data link will occur at a revised design rate of at least once every 60 seconds and nominally once every 15 seconds. Hardware and software changes associated with the ERDS are presented in Attachment 1, which is formatted consistent with the requirements of NUREG 1394, Rev. 1, "Emergency Response Data System (ERDS) Implementation."

Submittal of this information is made pursuant to the requirements of 10 CFR 50 Appendix E, Section VI.3.b, "Emergency Response Data System," and constitutes compliance with provisions for notifying the NRC at least 30 days prior to the currently scheduled ERDS modification implementation date of February 1, 2001.

There are no regulatory commitments contained within this letter.

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If you should have any questions on the above, please contact Mr. Paul Willoughby at (860) 447-1791, extension 3655.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Robert G. Lizotte

Master Process Owner - Assessment

Attachments (1)

cc: H. J. Miller, Region I Administrator (2 copies)

R. J. Conte, Chief, Operational Safety Branch, Region I

J. B. Hickman, NRC Project Manager, Millstone Unit No. 1

P. C. Cataldo, Resident Inspector, Millstone Unit No. 2

J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2

S. R. Jones, Senior Resident Inspector, Millstone Unit No. 2

V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3

A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

Director

Bureau of Air Management Monitoring and Radiation Division Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127

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Attachment 1

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3

Notification of Change to Emergency Response Data System
Planned Modifications List

I. Contacts

Contact Mr. Paul R. Willoughby "Team Leader-Generic Licensing" for concerns with respect to the Emergency Response Data System (ERDS) at the following address and telephone number.

Millstone Nuclear Power Station Northeast Nuclear Energy Company P.O. Box 128 Waterford, CT 06385-0128

(860) 447-1791, extension 3655

II. ERDS Communication Description

B.4 Exceptions

Please note any exceptions which must be taken to Section II and explain why.

The following quality tags are not incorporated into the Millstone ERDS, which is consistent with the ERDS design prior to this modification. The specific states depicted below are not represented by quality tags associated with the Millstone Plant Process Computer (PPC) and therefore not provided to ERDS. These exceptions are

Off-scan = 1 $High \ Alarm$ = 6 $Low \ Alarm$ = 7

The following quality tags are incorporated into the Millstone ERDS:

 Good
 = 0

 Suspect
 = 2

 Bad
 = 3

 Unknown
 = 4

 Operator Entered
 = 5

III. Selection of Data Feeders

- A. How many data feeders are there (six maximum)?

 One.
- B. Identify the selected data feeders and provide the following for each:
 - (1) a short description of the categories of data points it will provide (e.g. met, rad, or plant data points by unit) and
 - (2) the rationale for selecting it if another system can also provide its categories of data points.

The Plant Process Computer (PPC) via attached data conversion Personal Computer (PC) is the selected data feeder. All ERDS data points are provided by this feeder. The categories of data points provided for Millstone Unit No. 2 and Millstone Unit No. 3 are as shown below. Another system is not available to provide the ERDS data points.

Categories

- 1. Primary Coolant System
- 2. Secondary Coolant System
- 3. Safety Injection
- 4. Containment
- 5. Radiation Monitoring
- 6. Meteorological Data
- C. Which data feeder is the site time determining feeder? This should be the feeder which is providing the majority of data points.

The Plant Process Computer (PPC) via attached data conversion Personal Computer (PC) is the selected data feeder. This feeder is the site time determining feeder.

IV. Data Feeder Information

General Questions

1. Identification of Data Feeder

a) What is the name in local parlance given to this data feeder (e.g. Emergency Response Information System)? Please give both the acronym and the words forming it.

PPC - Plant Process Computer via attached Data Conversion Personal Computer (PC).

- b) Is this the site time determining feeder? Yes.
- c) How often will this feeder transmit an update set to the ERDS (in seconds)?

Data is refreshed at least once every five (5) seconds and transmitted to the NRC at the design rate of at least once every 60 seconds, nominally once every 15 seconds.

2. Hardware/Software Environment

a) Identify the manufacturer and model number of the data feeder hardware.

The Millstone Unit No. 2 PPC is a VAX 6610. The Millstone Unit No. 3 PPC is a MODCOMP Classic III/95. The Data Conversion PCs associated with each respective PPC are Intel-based PC workstations. The manufacturer and model number for these PCs are subject to change based upon requirements to replace non-functioning PCs or upgrade PCs as required. Changes in manufacturer and model number for replacement of PCs with functionally equivalent PCs are not expected to affect transmission format and computer communication protocol.

b) Identify the operating system.

Each Data Conversion PC runs under the Windows NT Operating System.

2. Hardware/Software Environment (Continued)

c) What method of timekeeping is implemented on this feeder system (Daylight Savings, Standard, Greenwich)?

Current local time.

d) In what time zone is this feeder located?

Eastern.

3. Data Communication Details

a) Can this data feeder provide asynchronous serial data communication (RS-232-C) with full modem control?

Yes.

b) Will this feeder transmit in ASCII or EBCDIC? ASCII.

c) Can this feeder transmit at a serial baud rate of 2400 bps? If not, at what rate can it transmit?

Yes.

d) Does the operating system support XON/XOFF flow control?
Yes.

(1) Are there any foreseen problems with the NRC using XON/XOFF to control the transmission of data?
No.

e) If it is not feasible to reconfigure a serial port for the ERDS linkup (i.e. change the baud rate, parity, etc.) please explain why.

N/A.

f) Do any ports currently exist for the ERDS linkup? No.

(1) If not, is it possible to add additional ports? Yes.

(2) If yes, will the port be used solely by the ERDS or shared with other non-emergency time users? Give details.

Solely for ERDS.

24/7.

4. Data Feeder Physical Environment and Management

a) Where is the data feeder located in terms of the TSC, EOF, and control room?

Control Room (Computer Room).

- b) Is the data feeder protected from loss of supply of electricity? Yes.
- c) Is there a human operator for this data feeder?

 Yes (see next response).
 - (1) If so, how may hours a day is the feeder attended?

 ERDS transfer is initiated from a Man-Machine Interface (MMI) workstation located in each respective Units control room as part of the event classification process. Each Units control room is staffed