

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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July 22, 1985

Docket No. 50-336
B11627

Dr. Thomas E. Murley
Regional Administrator
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Pressurizer Spray Valve Wiring Error

As a result of troubleshooting the cause of a plant trip which occurred on July 15, 1985, Northeast Nuclear Energy Company (NNECO) determined that a portion of a design change associated with the pressurizer spray valves which was implemented during the 1985 refueling outage was installed improperly. As part of the follow-up associated with this problem, a meeting was held in Region I offices on Thursday, July 18, 1985. During this meeting, a description of the event, its causes, and our corrective measures were presented. At the conclusion of this meeting, we agreed to formally submit our plans to prevent recurrence by July 23, 1985. This letter is in fulfillment of that commitment.

The pressurizer spray valve problem represents an instance where an error was made at the engineering and design stage of a plant modification which was propagated through the system without being detected prior to installation and use. While this particular problem had no adverse operational impact, the fact that it occurred is unacceptable to us. The error was initiated with a design drawing and was not identified at any of the subsequent checkpoints which could have rectified the problem. No single point in this system was any more critical than another; the problem should have been detected and corrected. After careful evaluation of the circumstances of this particular event and the status of various upgrades associated with the plant design change process within the Northeast Utilities system, we have arrived at the list of corrective measures identified below.

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Prior to listing the specific corrective actions, we re-emphasize the fact that our prime objective has been and remains to do the job right the first time. The proper design change process includes a correct initial design, independent verification of the accuracy of the design, and demonstration of functional operability following installation. We cannot afford to rely on pre-operational tests to reveal frequent engineering and design errors, nor can we assume that the engineering and design process will be flawless such that thorough pre-operational tests are not necessary. The scope of corrective actions identified below reflect that maturing and growth of the recently implemented new procedures associated with the design change process, and the existence of the Connecticut Yankee Plant Design Change Task Group (PDCTG) to independently evaluate the process.

Specifically, the following corrective actions are planned:

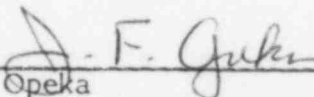
1. More education (as distinguished from training) is needed to ensure that the intent of a thorough pre-operational test is conducted for all design changes. For Millstone Unit No. 2, this education will be completed prior to implementation of any additional design changes. For Connecticut Yankee and Millstone Unit No. 1, this will be completed by September 30, 1985.
2. A memorandum from the Senior Vice President, Nuclear Engineering and Operations, will be issued to NE&O personnel involved in the design change process which will focus on the lessons learned from this problem. The lessons learned include the breakdowns in the engineering and design stage, independent verification, and pre-operational testing. This memorandum will be issued by August 21, 1985.
3. The CY PDCTG will include in their review the plant design change which caused this problem at Millstone Unit No. 2. It is noted that the PDCTG has previously committed to evaluate the adequacy of the design change related procedures issued on November 1, 1984. This review will be completed on the schedule required by the Order dated December 13, 1984.
4. As of this date, a subset of the plant design changes implemented during the 1985 refueling outage have been reviewed from a testing adequacy standpoint. The basis for not completing this review for all 1985 outage design changes was presented during the July 18, 1985 meeting. By September 30, 1985, all plant design changes implemented during the 1985 outage will be reviewed to confirm the adequacy of pre-operational testing.
5. For Connecticut Yankee and Millstone Unit No. 1, the plant design changes implemented between November 1, 1984 (the date of issuance of the new procedures) and the conclusion of the next refueling outages (currently scheduled to commence January 4, 1986 and October 19, 1985 respectively)

will be reviewed to confirm the adequacy of pre-operational testing. The scope of the review will be comparable to that being completed for Millstone Unit No. 2. This review will be completed prior to start-up from the upcoming refueling outages.

We will keep you informed of any significant insights derived from implementing the corrective actions outlined above. We trust you will find this information satisfactory.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



J. F. Opeka
Senior Vice President