

MAY 12 1988

Docket No. 50-336

Mr. Edward J. Mroczka  
Senior Vice President  
Nuclear Engineering and Operations  
Northeast Nuclear Energy Company  
P. O. Box 270  
Hartford, Connecticut 06141-0270

Dear Mr. Mroczka:

SUBJECT: SUPPLEMENT 1 TO THE MILLSTONE UNIT 2 DETAILED CONTROL ROOM  
DESIGN REVIEW (DCRDR) TAC NO. 65874

On February 12, 1987, the NRC staff issued a Safety Evaluation (SE) concerning the Millstone Unit 2 DCRDR. At that time, the NRC staff presented a list of six (6) outstanding items requiring resolution. In response to our February 12, 1987 SE, you submitted Supplement 1 to the Millstone Unit 2 DCRDR on August 31, 1987 and additional information by letter dated February 18, 1988. The enclosed SE concludes that you have acceptably addressed all of our concerns regarding the Millstone Unit 2 DCRDR.

Sincerely,

**"ORIGINAL SIGNED BY"**

David H. Jaffe, Project Manager  
Project Directorate I-4  
Division of Reactor Projects I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc w/enclosure:  
See next page

DISTRIBUTION

<del>Docket File</del>	DJaffe
NRC & Local PDRs	OGC-WF
SVarga	EJordan
BBoger	JPartlow
SNorris	ACRS(10)
Gray File	

LA:PDI-4  
SNorris  
05/11/88

PM:PDI-4  
DJaffe:ba  
05/11/88

D:PDI-4  
JStolz  
05/11/88

8805180383 880312  
PDR ADCK 05000336  
P PDR

Mr. Edward J. Mrocza  
Northeast Nuclear Energy Company

Millstone Nuclear Power Station  
Unit No. 2

cc:

Gerald Garfield, Esquire  
Day, Berry and Howard  
Counselors at Law  
City Place  
Hartford, Connecticut 06103-3499

R. M. Kacich, Manager  
Generation Facilities Licensing  
Northeast Utilities Service Company  
Post Office Box 270  
Hartford, Connecticut 06141-0270

W. D. Romberg, Vice President  
Nuclear Operations  
Northeast Utilities Service Company  
Post Office Box 270  
Hartford, Connecticut 06141-0270

D. O. Nordquist  
Manager of Quality Assurance  
Northeast Nuclear Energy Company  
Post Office Box 270  
Hartford, Connecticut 06141-0270

Kevin McCarthy, Director  
Radiation Control Unit  
Department of Environmental Protection  
State Office Building  
Hartford, Connecticut 06106

Regional Administrator  
Region I  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Bradford S. Chase, Under Secretary  
Energy Division  
Office of Policy and Management  
80 Washington Street  
Hartford, Connecticut 06106

First Selectmen  
Town of Waterford  
Hall of Records  
200 Boston Post Road  
Waterford, Connecticut 06385

S. E. Scace, Station Superintendent  
Millstone Nuclear Power Station  
Northeast Nuclear Energy Company  
Post Office Box 128  
Waterford, Connecticut 06385

W. J. Raymond, Resident Inspector  
Millstone Nuclear Power Station  
c/o U. S. Nuclear Regulatory Commission  
Post Office Box 811  
Niantic, Connecticut 06357

J. S. Keenan, Unit Superintendent  
Millstone Unit No. 2  
Northeast Nuclear Energy Company  
Post Office Box 128  
Waterford, Connecticut 06385

Charles Brinkman, Manager  
Washington Nuclear Operations  
C-E Power Systems  
Combustion Engineering, Inc.  
7910 Woodmont Avenue  
Bethesda, Maryland 20814



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

DETAILED CONTROL-ROOM DESIGN REVIEW, SUPPLEMENT 1

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

INTRODUCTION

Action Item I.D.1 of NUREG-0737 specified that all licensees and applicants for operating licenses are required to conduct a Detailed Control Room Design Review (DCRDR) to identify and correct design deficiencies. In response to the Millstone Unit 2 DCRDR submittals, the Commission issued a Safety Evaluation on February 12, 1987, which documented with exceptions, the acceptability of the Millstone Unit 2 DCRDR. The six outstanding items identified by the NRC were addressed by the licensee in Supplement 1 to the DCRDR Report submitted to the NRC on July 31, 1987. This Safety Evaluation documents the NRC's review of both the Report and a subsequent letter from Northeast Utilities to the NRC dated February 18, 1988.

DISCUSSION AND EVALUATION

Based on the February 12, 1987 Safety Evaluation conducted by the Office of Nuclear Reactor Regulation, the Millstone Unit 2 DCRDR was determined to be acceptable with the exception of six outstanding items. These six items were addressed separately in the licensee's July 31, 1987, Supplement 1 to the DCRDR Report. Each of the responses to these six items were reviewed for adequacy by the staff. This review is documented below.

1. During the staff's initial review of the licensee's DCRDR, it was noted that one control room survey had yet to be completed by the licensee. This survey concerned the process computer and the Safety Parameter Display System (SPDS). Upon completion by the licensee, the results of this survey were documented in both the licensee's supplemental report, and a letter from Northeast Utilities to the NRC dated February 18, 1988. These submittals document the completion of the Human Factors Checklists of NUREG-0700, Section 6.7, and the disposition of the Human Engineering Discrepancies (HEDs) which resulted from these reviews. The licensee stated that correction of all identified discrepancies is tentatively scheduled for completion by the end of the 1989 Refueling Outage.

Based on the completion of the Human Factors review of the Process Computer/ SPDS per NUREG 0700, Section 6.7, and the scheduled resolution of all the identified HEDs by the end of the 1989 outage; the staff has determined that the licensee has adequately resolved this item.

2. During the initial audit of the DCRDR, the NRC Audit Team noted a small number of discrepancies/oversights in the definition and recording of HEDs. The licensee was requested to reassess the method used to ensure that all HEDs are recorded and processed.

The licensee documented their response to this item in the Supplemental Report by stating that the task data forms had been reviewed to ensure that problems identified during task analysis were written as HEDs. The licensee also stated that no additional discrepancies/oversights had been identified. As a result of the staff's review of these actions, it has been determined that the licensee has adequately resolved this item.

3. The NRC Audit Team identified a potential concern in that operator surveys used for the DCRDR appeared to have been addressed in broad terms. The staff recommended that the licensee reassess the results of the operator survey to ensure all comments related to control room survey items and task analysis have been properly processed.

The licensee's response to this issue was recorded in the Supplemental DCRDR Report. This response documented a subsequent review of the operator survey summary. The licensee stated that all issues pertaining to the control room survey and task analysis have been resolved. In particular, operator concerns were categorized in one of the following ways: A specific HED was written for the concern; if the concern has already been resolved, no HED was written; or, if the concern duplicated an existing concern which has already been addressed by an HED, no additional HED was initiated.

The staff has concluded that the licensee's actions, and the activities directed toward resolving the operator survey generated HEDs have adequately addressed this item.

4. During the staff's review, it was noted that only one human engineering design guideline for control room modifications had been documented by the licensee. The licensee stated that additional design guidelines were to be generated. The staff recommended that these guidelines be documented in order to facilitate their use during design changes to the control room.

The licensee's response to this issue was recorded in the Supplemental DCRDR Report and amplified in their letter to the NRC dated February 19, 1988. These responses indicated that a compilation of control room design guidelines is in its final stage of development and distribution within NNECO.

Based on the imminent establishment of the Design Manual consisting of various control room design guidelines, the staff has determined that this item has been adequately addressed by the licensee.

5. The staff's initial review indicated that the function and task analysis for the Millstone Unit 2 DCRDR are acceptable. However, since IE Information Notice IN 86-64 indicated that many utilities may not have appropriately developed or implemented upgraded Emergency Operating Procedures (EOPs), the licensee was requested to evaluate whether the problems identified in IN 86-64 are applicable to the Millstone Unit 2 EOPs and DCRDR.

The licensee's response to this item was delineated in their Supplemental DCRDR Report and a subsequent letter dated February 18, 1988. These responses document that a formal review of IN 86-64 had been performed and that no modifications to the Millstone Unit 2 EOPs were required in order to address the concerns specified in the Information Notice. Since no changes to the EOPs were required, the DCRDR was therefore not affected by IN 86-64.

Based on the licensee's review of this matter, and on the determination that changes to the EOPs were not necessary, the staff has concluded that this item has been resolved by the licensee.

6. The last item identified during the staff's review concerned the status of Priority 1 HEDs which at the time of the review were being assessed by the Training Department, but had not been addressed by the training program.

The licensee responded to this item in the Supplemental DCRDR Report by stating that only a single priority one HED (TA-207) had been rejected by the Training Department. This particular HED was evaluated to be acceptably resolved by adding a valve position indicator to the subject component. This corrective action eliminated the need for additional training.

Based on the corrective action for HED, TA-207, and on the continued corrective actions to be conducted by the Training Department for other training related HEDs, the staff has determined that this item has been adequately resolved.

#### CONCLUSION

Based on the staff's review of the licensee's Supplemental DCRDR Report and subsequent letter dated February 18, 1988, the staff has concluded that the licensee has adequately addressed the six outstanding items enumerated in the February 12, 1987 NRC Safety Evaluation.

Principal Contributor: R. Brady

Dated: MAY 12 1988