

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

NOV 1 6 1987

Docket No. 50-423

Mr. Edward J. Mroczka Senior Vice President Nuclear Engineering and Operations Northeast Nuclear Energy Company Post Office Box 270 Hartford, CT 06141-0270

Dear Mr. Mroczka:

SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT 3 - EMERGENCY OPERATING PROCEDURES (EOP) UPGRADE PROGRAM (TAC NO. 65842)

Section 13.5.2.3 of Supplement No. 4 to NUREG-1031, Safety Evaluation Report related to the operation of Millstone Nuclear Power Station, Unit No. 3 dated November 1985, indicated that there were five open issues related to your program for preparing and implementing upgraded EOPs; three issues were related to the Millstone Unit 3 Emergency Response Guidelines (ERGs) and were evaluated by the staff in SSER No. 5, dated January 1986. The two issues remaining to be evaluated were:

- (1) The applicant should submit a description of the process for determining needed instrumentation and control characteristics in accordance with the schedule for submitting the DCRDR program plan.
- (2) The PGP should be revised to include a description of the reference method for validating the EOPs (not required prior to full power operation).

The staff's review has found that you have described a process that is acceptable for determining needed instrumentation and control characteristics. The results of the staff's review of issue (1) are contained in SSER No. 4, Section 18.1, Control Room, dated November 1985.

The staff conducted an additional review of the description of the reference method for validating submitted October 1, 1984, and also reviewed the description of this validation method contained in the INPO document, "Emergency Operating Procedures Validation Guidelines", which was referenced in the PGP. As a result of this review, the staff concludes that the description of the reference method for validating EOPs, together with citing the INPO document, is acceptable.

In a letter from E. J. Mroczka to the NRC, dated June 26, 1987, you identified, during a self-initiated review of the PGP in response to Information Notice No. 86-64, "Deficiencies in Upgrade Programs for Plant Emergency Operating Procedures", August 14, 1986, that you had not completely met a commitment to validate all EOPs using their plant-reference simulator and to train operators on all the EOPs using the simulator during cold licensing training. You also stated that, although nine EOPs were not initially validated on the simulator, they were validated using a walk-through technique to ensure that they were consistent and technically accurate and that all operators were trained on them. Further, as of April 1, 1987, eight of the nine EOPs had been validated on the simulator; the exception, "Response to Inadequate Core Cooling", could not be modeled by the simulator. The staff finds these actions acceptable.

Enclosed is the staff's safety evaluation which documents the results of our review. This report closes out TMI Action Plan Item 1.C.1 for Millstone 3 and our review of the deficiency in the EOP upgrade program identified in the June 25, 1987 letter.

Sincerely,

"OFFICE SELECT STIFF

Robert L. Ferguson, 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

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cc:
Gerald Garfield, Esq.
Day, Berry & Howard
City Place
Hartford, Connecticut 06103-3499

Mr. Maurice R. Scully, Executive Director Connecticut Municipal Electric Energy Cooperative 268 Thomas Road Groton, Connecticut 06340

Robert W. Bishop, Esq. Corporate Secretary Northeast Utilities Post Office Box 270 Hartford, Connecticut 06141

Mr. William J. Raymond Senior Resident Inspector Office U. S. Nuclear Regulatory Commission Millstone III P. O. Box 811 Niantic, Connecticut 06357-08

Mr. Michael L. Jones, Manager Project Management Department Massachusetts Municipal Wholesale Electric Company Post Office Box 426 Ludlow, Massachusetts 01056

Regional Administrator
U. S. NRC, Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Mr. Karl Abraham Public Affairs Office, Region I U. S. Nuclear Regulatory Commission, King of Prussia, Pennsylvania 19406 Millstone Nuclear Power Station Unit No. 3

Ms. Jane Spector Federal Energy Regulatory Commission 825 N. Capitol Street, NE Room 8608C Washington, D.C. 20426

Mr. Kevin McCarthy, Director Radiation Control Unit Department of Environmental Protection State Office Building Hartford, Connecticut 06115

Burlington Electric Department c/o Robert E. Fletcher, Esq. 271 South Union Street Burlington, Vermont 05402



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

NORTHEAST NUCLEAR ENERGY COMPANY ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-423

INTRODUCTION

The staff's safety evaluation of November 1985 determined that the Procedures Generation Package (PGP), which was submitted in partial fulfillment of TMI Task Action Plan Item 1.C.1, was acceptable with the exception of five items; three items were related to their Emergency Operating Procedures (EOPs), one was related to the task analysis requirement of Generic Letter 82-33, and one item was related to the validation description contained in the PGP. The items were:

- (1) The staff requires that guidelines and criteria for the use of the RCS loop isolation valves during accident recovery be established before operation above 5 percent of full power.
- (2) The staff requires that the degraded core cooling guideline, EOP 35 FR-C.2, be revised before operation above 5 percent of full power to direct the operator to the correct procedural EOP steps and to include the use of RVLMS.
- (3) The staff requires the applicant to revise the Millstone 3 EOPs to include RVLMS set points corresponding to a 50 percent steam/water mixture with reactor coolant pumps running, or demonstrate that the proposed alternatives are acceptable before operation above 5 percent of full power.
- (4) The applicant should submit a description of the process for determining needed instrumentation and control characteristics in accordance with the schedule for submitting the DCRDR program plan.
- (5) The PGP should be revised to include a description of the "reference method" for validating the EOPs (not required prior to full power operation).

Regarding items (1)-(3), the staff concluded in supplement number 5 to the safety evaluation report for the operation of Millstone Nuclear Power Station Unit No. 3, dated January 1986, that these items had been satisfactorily addressed by the licensee in a letter from J. F. Opeka (NNECO) to V.S. Noonan (NRC), dated January 14, 1986. The staff's review of items (4) and (5) is contained in the evaluation which follows.

In a letter from E. J. Mroczka to the NRC dated, June 25, 1987, which documented the results of a PGF review initiated by the licensee in response to an NRC Information Notice, 86-64, "Deficiencies in Upgrade Programs for Plant Emergency Operating Procedures", dated August 14, 1986, the licensee indicated that they had not met a commitment made in the PGP to validate all EOPs and train all licensed operators on all EOPs using the simulator during cold license training, and provided an explanation for not meeting this commitment.

EVALUATION

The staff's review of item (4) indicates that the licensee has described a process that is acceptable for determining needed instrumentation and control characteristics. The results of the staff's review of this issue are contained in SSER No. 4, Section 18.7, Control Room, dated November 1985.

The staff reviewed the licensee's description of the "reference method" for validating EOPs provided in their Procedures Generation Package (PGP) submitted October 1, 1984. The staff also reviewed the description of this validation method contained in the INPO document, "Emergency Operating Procedures Validation Guidelines" (INPO 83-006), which the licensee indicated in their PGP was the basis for their validation program. The INPO document describes the "reference method" in detail. As a result of these reviews, the staff concludes that the licensee's abbreviated description in the PGP of the "reference method" for validating EOPs and their citation of the INPO document, which contains a detailed explanation of this method, adequately addresses issue (5).

The staff has also reviewed the licensee's letter of June 23, 1987, in which they indicated that they had failed to meet a commitment made in their PGP to validate all EOPs and train all licensed operators on all EOPs, using the simulator, during cold license training. In the letter, the licensee stated that the cause of not meeting this commitment was poor communication; the personnel responsible for validating the EOPs understood that validating all EOPs using the simulator was a corporate goal rather than a commitment made to the NRC. The licensee indicated; however, that all EOPs had been validated, using a walk-through technique, in the Millstone Unit 3 control room during cold license training and that all operators were trained on all the EOPs during cold license training in accordance with the training program described in the PGP. The licensee further stated that eight of the nine EOPs that did not receive validation on the simulator as of April 1, 1987; one EOP, "Response to Inadequate Core Cooling", could not be validated on the simulator because the simulator cannot model the entry condition for this EOP. The licensee-initiated corrective actions described in the letter, which were verified by the staff in a telephone conversation with the licensee on October 19, 1987, is satisfactory evidence that the licensee has now met their PGP commitment.

CONCLUSION

Based on this evaluation, the staff concludes the TMI Task Action Plan Item 1.C.1 is closed and that the licensee has satisfactorily addressed the commitment made in their PGP to validate EOPs and train licensed operators on them using the Millstone Unit 3 simulator.

Dated: WOV 1 6 1987

Principal Contributor: John Bongerra