



Kewaunee Nuclear Power Plant
N490, State Highway 42
Kewaunee, WI 54216-9511
920-388-2560

Operated by
Nuclear Management Company, LLC



March 30, 2001

10 CFR 2.201

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

Ladies/Gentlemen:

DOCKET 50-305
OPERATING LICENSE DPR-43
KEWAUNEE NUCLEAR POWER PLANT
RESPONSE TO NOTICE OF VIOLATION 2000-15-01

Reference: Letter from J. E. Dyer (NRC) to M. E Reddemann (NMC) dated February 28, 2001.

In the reference, the Nuclear Regulatory Commission (NRC) provided Nuclear Management Company, LLC with the results of the NRC final significance determination for violation 2000-15-01. As requested in the inspection report cover letter, the Attachment to this letter provides NMC's response to the violation.

If you should have any questions with regard to this response, please contact me or a member of my staff for clarification.

Sincerely,

Kyle A Hoops
Manager-Kewaunee Plant

TJW

Attach.

cc: US NRC Senior Resident Inspector
US NRC Region III
US NRC Director-Office of Enforcement

IEO1

ATTACHMENT

Letter from K. A. Hoops (NMC)

to

Document Control Desk (NRC)

Dated

March 30, 2001

Response to Notice of Violation No. 50-305/2000-15-01

NRC Notice of Violation

During a NRC inspection conducted on August 14-18, 2000, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 50.54 (q) requires, in part, that a license authorized to possess and operate a nuclear power reactor must follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47 (b) and the requirements of Appendix E to Part 50.

10 CFR 50.47 (b) (2) requires, in part, that timely augmentation of response capabilities is available.

10 CFR 50.47 (b) (14) requires, in part, that deficiencies identified as a result of exercises or drills will be corrected.

The Kewaunee Nuclear Power Plant Emergency Plan (KNPPEP) implements the requirements of 10 CFR 50.54 (q). Section 8.2.2 (2)g of KNPPEP, Revision 22, "Radio Pager Response Drill," requires that an unannounced radio pager response drill be conducted quarterly.

Emergency Plan Maintenance Procedure 09.01, Revision H, "Radio Pager Testing," implements the requirements of the KNPPEP, Section 8.2.2 (2)g, Revision 22. Section 5.2 requires, in part, that for performance measure purposes, an augmentation (response) capability determination will be conducted each month.

Emergency Plan Maintenance Procedure 2.6, Revision B, "Emergency Preparedness (EP) Measurements," defines the acceptance criteria utilized to evaluate drill success for unannounced radio pager drills performed in accordance with EPMP 09.01. This procedure requires that 11 personnel respond within 30 minutes and 15 personnel respond within 60 minutes.

Contrary to the above, timely augmentation of response capabilities was not available, in that none of the monthly radio pager drills conducted during the second, third and fourth quarters of calendar year 1999 and the second quarter of calendar year 2000 were successful. Specifically, the licensee's drill records indicated that one to three of the 11 pre-designated 30-minute response positions would not have been filled during eight of the nine augmentation drills conducted during the second, third, and fourth quarters of the calendar year 1999. These records also indicated that one or two of the 15 pre-designated 60-minute response positions would not have been filled during five of these nine drills. Records of the two drills conducted during the second quarter of calendar year 2000 indicated that one 30-minute response position would not have been filled in each drill and a 60-minute position would not have been filled in one of the two drills. Furthermore, the licensee failed to correct these deficiencies that were identified as a result of the monthly drill failures.

NMC's Response

NMC does not contest this violation. As a result of the NRC's finding, we performed a root cause of the failures and developed corrective actions to prevent their recurrence. The following paragraphs are a summary of the results of that analysis.

Conclusions of the Analysis

1. Kewaunee's corrective action program, the Kewaunee Assessment Process (KAP), was not effectively used to investigate and determine the apparent causes for continuing pager test failures. There was also a weak process for trending failures and escalating adverse trends for further, more rigorous investigation.
2. Many responders did not understand the specific time requirements with regard to responding to their pager. For a drill, responders were unaware that their travel time was added to their response time. Therefore, a failure to provide clear expectations or written guidance contributed to test failures.
3. Emergency response organization (ERO) resources need realignment to ensure adequate depth and flexibility in filling key response positions.
4. A review of the test methodology determined that the acceptance criteria were conservative and the estimated travel times for several responders were overly conservative. As a result, positions that would have been filled in the required time were identified as failures.

Root Causes and Contributing Causes

The following were determined to be the root causes of the event.

1. The controls in place for shift augmentation do not meet the needs of the plant. Management has not effectively acted to provide increased depth and flexibility in the emergency response organization following a reduction in staffing several years ago. Contributing to this are:
 - a. There was no formal process to assure that a trained individual assigned to a Table B-1 position would be available to fill Table B-1 positions when paged.
 - b. Although the overall number of responders to a drill is high, most responders are not qualified or available to fill key Table B-1 positions.
 - c. Limitations with signal coverage has resulted in unsuccessful tests of the "all call" page system.
 - d. Test criteria are applied without reasonable tolerance and the verification of results is insufficient to accurately identify satisfactory responses.

2. Management has accepted an adverse trend of pager test failures without requiring investigation into root causes. Test failures were seldom investigated for apparent cause and the investigations that had been conducted were ineffective without senior management involvement or oversight. Contributing to this were:
 - a. The pager test has failed frequently since August 1996 with only two KAP reviews requiring investigation into the cause for these failures, one in 1996 and one in 2000. Several other KAPS were initiated during 2000 for trend purposes even though the failure trend was well known
 - b. An assessments performed by Nuclear Plant Support Services and other assessments over the last three years identified a decreasing trend in pager; however, a root cause investigation was not initiated.
 - c. Corrective actions were initiated and closed at the department level without apparent input or review by other affected work groups or senior management. As a result, the actions were ineffective, consisting mainly of process reviews or short-term actions aimed at heightening the awareness of support groups.

Corrective Actions

The following actions have or will be taken to prevent recurrence of this violation.

Immediate Actions

1. On November 20, 2000, the Plant Manager issued a letter to ERO personnel, which was effectively used to heighten the awareness of responders to deficiencies in the previous pager tests and emphasized the requirement for personnel to carry the pager and respond immediately when the pager was activated. This corrective action has been completed.
2. ERO personnel in Table B-1 positions were placed "on-call." A schedule has been established to assure individual responsibility for filling each Table B-1 position. This is a temporary action until programmatic improvements are completed that may eliminate the need for "on-call" status.

As a result, all pager tests have been successful since November 2000.

Long Term Actions

1. Establish an emergency response organization focused on providing shift augmentation for Table B-1 positions.
 - a. Develop ERO candidates to achieve a greater depth in the ERO. This corrective action will be completed by July 31, 2001.

- b. Use cross training to improve organizational flexibility for multiple ERO responders to fill Table B-1 functions (Training for several ERO positions to meet Table B-1 functions would increase the depth of the organization and add flexibility). This corrective action will be completed by July 31, 2001.
 - c. Develop additional notification methods that assure successful notification in all conditions, including late night. This corrective action will be completed by July 31, 2002.
 - d. As previously described, personnel filling Table B-1 positions have been placed "on call." NMC is currently looking at administrative controls that would provide adequate assurance that Table B-1 positions would be filled when called upon without using the "on call" process. If sufficient controls can be developed, the "on call" process will be discontinued.
2. Improve the review of drill and test data for key responders to ensure that test success or failure is accurately determined and verified.
- a. Improve the use of the KAP for documenting any significant drill deficiencies or test failures and perform investigations of these events. Improvements have already been made to the procedures for the KAP and Emergency Planning that address this issue. This corrective action has been completed.
 - b. Perform effectiveness reviews of corrective actions intended to prevent event recurrence. This corrective action will be completed by July 31, 2002.
 - c. Develop lessons learned from any test failures, provide these to responders, and incorporate them as appropriate into the retraining program. This corrective action will be completed by July 31, 2002.