Omaha Public Power District
1623 Harney Omaha, Nebraska 68102-2247
402/536-4000

December 15, 1989
LIC-89-1084

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

References: 1. Docket No. 50-285
2. Letter NRC (J. L. Milhoan) to OPPD (K. J. Morris) dated October 16, 1989 (Inspection Report 89-29)

Gentlemen:

SUBJECT: Response to Inspection Report 50-285/89-29

Please find attached Omaha Public Power District's (OPPD) response and schedule for correcting the items identified in Reference 2. OPPD is encouraged that the inspection found no violations or deviations and continues to be committed to the continuing improvement of our Emergency Response capabilities.

The poor coordination of the Technical Support Center (TSC) (Item 8929-02) and the Operations Support Center (OSC) (Item 8929-03) require additional investigation into the primary causes. An action plan to correct these problems will be provided by January 12, 1990 as previously discussed with your staff.

In addition to the items identified in Reference 2, OPPD has evaluated the concerns expressed in the cover letter of the inspection report and submits the following responses:

1. Overstaffing in the Emergency Response Facilities.

   During activation of the OPPD Emergency Response Organization (ERO), both primary and backup personnel are notified and asked to report to their emergency duty station. To correct this problem, backup staff members will be sent home in accordance with the rotating shift concept. Procedures will be revised to institutionalize the process.

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2. Selection of staff member whose expertise was advantageous.

   OPPD routinely assigns individuals with a wide spectrum of knowledge to the ERO in order to have expertise capable of handling numerous types of emergency situation. This particular individual was assigned two months prior to scenario selection and development. This individual had no prior knowledge of the exercise scenario. Intentional staging did not occur in any ERO positions.

3. Staff response to the injured/contaminated person, failure to demonstrate accountability and prompting.

   The repeat weakness pertaining to the staff response to the injured/contaminated person, the failure to demonstrate accountability and prompting are considered significant by OPPD, and, as described previously, are being corrected as part of the overall long term procedures revision and training upgrade efforts. Additional information is presented in the Attachment under items 285/89-29 - 4, 5 and 6, respectively.

4. Inability to ascertain source of containment leakage.

   The issue concerning the staff's ability to ascertain the specific hypothetical source of the containment leakage is being investigated further to determine a cause. However, as noted in your cover letter, the release pathway was eventually narrowed down to Room 59 pipe penetration room, in the Auxiliary Building. Although the exact leak component (HCV-345) was not specifically identified, the release pathway was identified and isolated. Since the release had been successfully terminated by closing the dampers on the exhaust duct to Room 59, and the exposure rates in Room 59 were in excess of 10,000 R/hr, ALARA practices and evaluation negated sending an individual into the room to determine the exact leaking component. It is highly unlikely that the exact leak could have been rapidly found in a room filled with steam and containing numerous piping penetrations.

   Because the release had been terminated, it is believed that the ALARA principle took precedence over having individual(s) receive potentially high exposures to identify a component leaking into an isolated room.

   The ability of the Technical Support Staff to identify accident related problems and solutions was part of a structured analysis discussion conducted on November 8, 1989. In order to ensure a proper resolution of TSC staff performance, a continued evaluation of the potential causes is in progress and will be completed by January 12, 1990.

5. Scenario discrepancies.

OPPD recognizes that some scenario data was lacking in detail and may not have been consistent with a steam/water leak through Room 59, as well as other minor scenario discrepancies. In an attempt to eliminate scenario related problems experienced in previous exercises, OPPD created a broader scenario development committee for the 1989 annual exercise. The goal of the committee was to improve the realism and accuracy of the scenarios used for exercises. OPPD will review the membership representation of the committee to ensure adequate representation. Although significant improvements have been made in the scenarios produced in 1989 by the committee, the committee will be encouraged by management to increase their review efficiency to ensure adequate, consistent and accurate scenarios are produced.

If you should have any questions concerning this matter, please contact me.

Sincerely,

K. J. Morris
Division Manager
Nuclear Operations

KJM/pjc

Attachment

c: LeBoeuf, Lamb, Leiby & MacRae
R. D. Martin, NRC Regional Administrator
A. Bournia, NRC Project Manager
P. H. Harrell, NRC Senior Resident Inspector

ATTACHMENT

RESPONSE TO 1989 EXERCISE WEAKNESSES

Item 8929-01

The fact that the licensee failed to establish a control point at the entrance of the Control Room is considered to be an exercise weakness.

CAUSE IDENTIFICATION

Currently, Procedure RR-83, "Inplant Monitor Coordinator" addresses actions to be taken to ensure that radiological controls are established during emergencies. However, as written, the procedure does not contain explicit directions for establishing control points at emergency response facilities and the Control Room.

ACTIONS TO PREVENT RECURRENCE

The failure to establish control points at emergency facilities is symptomatic of a problem with the content of implementing procedures currently being used by the ERO. Draft emergency implementing procedures CR-1005 and TSC-1200 address the establishment of step off pads at the Control Room and Technical Support Center during emergencies. At the declaration of an Alert or higher emergency classification, the Shift Radiation Protection Technician in the Control Room will set up step off pads at the entrances. The Onsite-Offsite Monitor Coordinator is responsible to set up step off pads at the entrance to the TSC.

Prior to approval of revised procedures, radiation protection technicians will be notified on the recommended method for establishing and maintaining radiation control points. This notification will be completed by December 31, 1989. Ongoing technician radiation protection training will contain this method until appropriate procedures are established.

RESPONSE TO 1989 EXERCISE WEAKNESSES (Continued)

Item 8929-02

The fact that the TSC staff response exhibited, at times, poor coordination, direction and technical support to the Control Room is considered to be an exercise weakness.

CAUSE IDENTIFICATION

General causes contributing to this weakness can be grouped under the categories of (1) procedures, (2) equipment and (3) organization of assignments to responsible managers located in the TSC. There is insufficient guidance in the current procedures used by key TSC staff to clearly define their responsibilities for coordinating with and directing the control room staff. The telephone lines available for communicating between the Control Room and TSC were not sole use. This contributed to an inability to maintain effective communications between the Control Room and TSC.

ACTIONS TO PREVENT RECURRENCE

OPPD identified inadequate consideration of human factors in procedures as a contributor to weak performance during the 1988 exercise. As of November 1, 1989, significant progress has been made in the procedure revision effort.

OPPD has determined that managers in the TSC sometimes fail to implement all their responsibilities. In a recent problem identification session led by instructors responsible for training utility personnel on the Kepner-Tregoe problem solving methodology, several potential causes of the problem were identified. Further evaluation of exercise records is needed to ensure that we have discovered all of the true causes. The potential causes that have been identified are being compared against emergency planning data to verify that an identified cause is valid. Corrective actions will be implemented to address the verified causes. OPPD will develop an action plan based upon the results of our analysis and update this submittal by January 12, 1990.

An improvement in the communications capabilities of the TSC since the exercise is the installation of a direct ringdown dedicated telephone between the Site Director and Recovery Manager. Also, new telephone extensions of TSC staff members were assigned. This change eliminated the ringing of emergency members phones in other locations of the plant.

RESPONSE TO 1989 EXERCISE WEAKNESSES (Continued)

Item 8929-03

The fact that the response of the OSC staff was not always well coordinated is considered to be an exercise weakness.

CAUSE IDENTIFICATION

The OSC exhibited poor coordination for causes similar to those identified for the TSC staff coordination weaknesses. In addition, the location of the two facilities in close proximity within the TSC building resulted in crowding problems and excessive traffic back and forth between the OSC and TSC spaces.

ACTIONS TO PREVENT RECURRENCE

Prior to the 1989 exercise the Emergency Planning staff formulated plans to relocate the OSC from its current location to alleviate congestion in the facility. Relocation of the OSC to the plant maintenance shop conference room area in 1990 during the implementation of the upgraded procedures is under review.

OPPD is applying a problem solving methodology to emergency planning weakness discovered during this exercise. OPPD is working to accurately characterize the cause of the problems discovered. Preliminary results of the application of this process indicate that some problems may be common to the TSC and OSC. Causes will be evaluated against exercise data to validate them and corrective actions will be developed to eliminate identified weaknesses. An action plan will be formulated and submitted by January 12, 1990.

RESPONSE TO 1989 EXERCISE WEAKNESSES (Continued)

Item 8929-04

The fact that the staff responding to the injured/contaminated person demonstrated poor radiological practices is considered to be an exercise weakness.

CAUSE IDENTIFICATION

The cause of this weakness was inadequate drillmanship. Revised training and upgrades in the Fort Calhoun Station Health physics staff prior to exercise improved performance in radiological practices during emergencies; however, additional training improvements are needed and planned. Staging of the injured individual in the "clean" area near the door leading to the cold lab in Corridor 52, made it difficult for the players to immediately and correctly assess the contamination status of the individual. The scenario was originally designed to take place inside the hot lab, but did not because the hot lab is located inside the Radiation Controlled Area. ALARA concerns precluded the conduct of the scenario where it was designed to occur.

ACTIONS TO PREVENT RECURRENCE

A complete job analysis for ERO positions has been completed and is being reviewed by selected supervisory and management staff to implement a performance based training program.

Periodic drills will continue to be conducted to improve the effectiveness of the medical responders while the improved training program is being implemented.

The Scenario Development Group (SDG) and exercise controller organizations will devote additional attention to detail when planning and staging inplant scenarios. Assignments to the SDG for the 1990 exercise have been made. These assignments include some individuals aware of the 1989 staging problems. Their experience and specific controller training will result in improved scenario development.

RESPONSE TO 1989 EXERCISE WEAKNESSES (Continued)

Item 8929-05

The fact that timely personnel accountability during evacuation of the protected area was not demonstrated is considered to be a weakness.

CAUSE IDENTIFICATION

Procedural inadequacies had been identified in maintaining accountability in emergency facilities and assembly areas prior to evacuation. Procedural inadequacies also exist with performing accountability following evacuation of the protected area by nonemergency personnel. Improvements in the accountability process were realized by the establishment of assembly areas prior to 1989 exercise. However, during the 1989 exercise, assembly area control and evacuation accountability problems were noted. OPPD is reevaluating continued use of the assembly area practice.

ACTIONS TO PREVENT RECURRENCE

Upgrades to the site security system are in progress including more access and egress turnstiles. Alternative accountability methods during evacuation are being developed. These upgrades will provide a primary and back-up method which will allow performance of evacuation accountability from the protected area efficiently within 30 minutes. A timed accountability drill or drills will be tested before December 31, 1989 to demonstrate and verify the improved method. A letter explaining the new evacuation accountability method will be issued to all badged personnel by February 28, 1990. The new method will also be incorporated into General Employee Training (GET).

RESPONSE TO 1989 EXERCISE WEAKNESSES (Continued)

Item 8929-06

The fact that overstaffing, prompting, and simulation detracted from the extent of free play is considered to be an exercise weakness.

CAUSE IDENTIFICATION

A. Overstaffing

The primary reason for the overstaffing observed in the OSC, TSC and EOF was the failure of lead emergency response personnel to establish a schedule for the relief shift and subsequently to dismiss excess personnel.

B. Prompting

The noted instances of controller prompting is indicative of an inadequate controller training program.

C. Simulation

Despite an emphasis not to simulate actions that can be implemented without danger to players or the station, lack of attention on the part of the players and controllers during their respective briefings was the most probable cause for this weakness.

ACTIONS TO PREVENT RECURRENCE

A. Overstaffing

Current emergency response organization notification and activation procedures require primary and backup emergency response personnel to report for duty. This approach is taken to ensure that all positions are quickly filled. Once all the positions have been filled, the additional personnel represent the next shift, should a relief shift be required. Accordingly, the people would be sent home and return per the schedule. When personnel arriving after primary positions have been staffed receive no instructions to leave the facilities, they may remain and assist their colleagues.

RESPONSE TO 1989 EXERCISE WEAKNESSES (Continued)

Item 8929-06 (Continued)

ACTIONS TO PREVENT RECURRENCE (Continued)

Future exercises will stress the need for the second shift personnel to vacate their emergency response facility, once they have been designated as a second shift individual. This demonstration will be emphasized during normal emergency response training as well as during pre-exercise briefings.

As part of the ongoing Emergency Plan Implementing Procedure revision effort, current positions were evaluated with respect to workload and number of responsibilities. Where appropriate, either an additional position was created to assist the key managers with their responsibilities or the number of tasks/responsibilities were removed and distributed among the staff, thus reducing the workload. During the verification and validation of the procedures, an additional review will be performed to determine if further streamlining is desirable.

B. Prompting

In addition, a review of the controller procedures contained in the exercise manuals will be performed and the procedures will be increased in detail where necessary. Formal controller training will be developed and implemented in this program before the 1990 exercise. OPPD will continue its efforts to develop consistent controller teams, thus building up a team knowledgeable of their responsibilities. Whenever possible, the same team members will be used to evaluate drill and practice exercises during the year.

C. Simulation

The player briefings and controller training will emphasize that simulations must be kept to a minimum. A demonstration of examples of simulation observed during the 1989 exercise and other drills and exercises will be in this training and will alleviate the lack of attention experienced in the 1989 briefing. Controllers will be expected to ensure the players minimize simulations.