

U.S. NUCLEAR REGULATORY COMMISSION
REGION III

Report No. 50-255/89013(DRSS)

Docket No. 50-255

License No. DPR-20

Licensee: Consumers Power Company
212 West Michigan Avenue
Jackson, MI 49201

Facility Name: Palisades Nuclear Power Plant

Inspection At: Palisades Site, Covert, Michigan

Inspection Conducted: May 9-12, 1989

Inspector: *J. P. Patterson*
J. P. Patterson

6/2/89
Date

Approved By: *T. Mosk*
W. Snell, Chief
Emergency Preparedness and Effluents Section

6/2/89
Date

Inspection Summary

Inspection on May 9-12, 1989 (Report No. 50-255/89013(DRSS))

Areas Inspected: Routine announced inspection of the following areas of the Emergency Preparedness Program: activations of the emergency plan (IP 92700), licensee actions on previously identified items (IP 92701), emergency plan and implementing procedures, organization and management, emergency facilities and equipment, training, and independent audits (IP 82701). Section 5 of this report provides an updated summary of TMI Safety Issues Management System (SIMS) items related to emergency preparedness. This inspection was conducted by one NRC inspector.

Results: Of the areas inspected, no violations, deviations or deficiencies were identified. The emergency preparedness program is getting very good management support. Organization of training courses has continued to improve. A positive, cooperative attitude was evidenced by all personnel contacted during the inspection.

DETAILS

1. Persons Contacted

G. Slade, Plant General Manager
J. Lewis, Technical Director
R. Orosz, Engineering and Maintenance Manager
W. Beckman, Radiological Service Manager
R. Rice, Operations Manager
P. Loomis, Emergency Planning Administrator, Corporate
N. Brott, Emergency Planner, Palisades
J. Brunet, Licensing Analyst
M. Dawson, Nuclear Training Instructor, Emergency Planning
R. Margol, Quality Assurance Administrator
J. Ridley, Emergency Planning Technician
P. Slaughter, Nuclear Emergency Planner

*M. Kane, Shift Supervisor

*T. Palmisano, Systems Engineering Superintendent

*E. Bogue, Health Physics Supervisor

*Denotes those who did not attend the exit interview on May 12, 1989.
All others listed above did attend.

2. Licensee Action on a Previously Identified Item

(Closed) Open Item No. 50-255/87012-01: This item related to the inability to hear the siren during the 1987 exercise, especially in most areas of the Support Building. In addition, the Public Address (PA) reception was unclear in many areas of the plant. To rectify these conditions the licensee conducted a subjective audibility survey in February 1988. The non-functional PA speakers, 51 out of 167, were replaced or repaired over a period of time.

This ongoing process along with the purchase of two sirens for the Support Building has alleviated the conditions at this time. A siren was placed on each of the two levels of the Support Building. Both of these sirens have been tested successfully. Also, a Systems Engineer now includes both the PA speaker system and the two new sirens on a scheduled maintenance and surveillance routine. Up to this time these types of emergency response equipment were not included in this routine maintenance category by the Systems Engineer. This item is closed.

3. Emergency Plan Activations

The inspector identified six emergency plan activations during this inspection period since May 1, 1988. A review of documentation and interviews with cognizant personnel confirmed that each of these events were based on the proper EAL and notifications were timely to the offsite agencies and the NRC. Other phases of these events included involvement and adequate documentation by the EP Coordinator.

One of these six activations on September 3, 1988, was due to a stuck fuel assembly in the reactor. This occurrence resulted in a partial activation of the emergency response organization as a precautionary step if the bundle dropped back into the core or the flooded refueling area. The presence of added emergency response personnel led to development of various planning contingencies should a greater accident occur. This partial activation of the emergency plan was a good example of conservative management action and coordination even though it was not required by the plan.

4. Operational Status of the Emergency Preparedness Program (82701)

a. Emergency Plan and Implementing Procedures

A change was made that affected the composition of the minimum shift staffing as listed in Figure 5-6 of Section 5 of the Site Emergency Plan (SEP). This change redefined certain minimum shift staffing positions and the response time for these positions. The four positions involved were Mechanical Maintenance, Electrical Maintenance, Radiation Safety Technician, and Chemistry Technician. These changes were evaluated as part of an SEP revision, designated Revisions 8 and 9, and approved in a letter to the licensee dated January 6, 1989.

Two Emergency Implementing Procedures (EIPs) addressing offsite monitoring and dose calculations were eliminated by the licensee. EIP 6.11 has now been incorporated into Appendix F of the General Office Emergency Planning Procedures, and the other, EIP 6.12, has been incorporated into EIP 6.0. These two changes should reduce the previous redundancy of the procedures and make the new ones more usable. These procedure numbers are listed in Appendix D of the SEP. Procedure EIP 12.1, which relates to evacuation and assembly areas, has been revised in response to a finding in the previous inspection. Alternate assembly areas, which provide shelter for inclement weather, have now been established. Final NRC approval of certain EAL changes, basically relating to primary coolant system leaks, also took place during this inspection period.

The annual review of EALs with the State and Counties was accomplished by a letter in September 1988 followed by a joint meeting between the licensee's corporate EP group and representatives for each governmental agency.

Based on the above findings, this portion of the licensee's program was acceptable.

b. Emergency Facilities, Equipment, and Supplies

Two inventory kits were inspected for adequacy. One was in the Operational Support Center (OSC) and the other was in the Technical Support Center (TSC). All items selected were in operating condition and proper range dosimeters were present in both kits. Records examined indicated that all emergency kits were inventoried

on a quarterly basis. No discrepancies were identified. The Emergency Response Data System (ERDS) is being established to provide a direct link to NRC terminals at their Headquarters. Palisades is the first plant in Region III to establish this link. Critical function monitors have been established in the Control Room, TSC, and EOF to serve as conduits for the ERDS. The data generated included reactor core and cooling system parameters, containment conditions, radioactive release data, and current meteorology conditions.

The offsite siren warning system for the 10 mile EPZ around the site has maintained an operability of over 95% during the last year with the exception of July 1988. In that month seven sirens had some operating problems, three actually failing to alarm. These sirens were repaired and tested for operability within 3-4 days. All were then functioning adequately. Maintenance is performed exclusively by Consumers Power. To avoid delays in replacing valuable components the licensee maintains a small supply of spare modules such as tone generators and radio receivers. A full cycle test is conducted monthly including full alarm. This maintenance and overall responsibility for the day to day operation of the system is under the direction of an emergency planner whose job location is at the Palisades site. Prepaid postcards are sent out monthly to the residents inquiring as to whether the siren could be heard. These replies form a basis for identifying malfunctioning or low volume sirens, in addition to normal maintenance and repair.

Based on the above findings, this portion of the licensee's program was acceptable.

c. Organization and Management Control

A new Emergency Preparedness Coordinator, Mr. Norman Brott, was appointed in June 1988. He replaced Mr. James Brunet who is now a Licensing Analyst at Palisades. A new position of Operations Support Supervisor (OSS) has been created. This is an all-shift position. Those selected to be OSSs receive the same training given the Shift Supervisor and the Shift Engineer, with the major exception that the OSS is not a part of the emergency response organization. There were no other substantive changes in the organization which would effect the EP functions.

Eleven Letters of Agreement were reviewed and found to be satisfactory and current. A new Emergency Management Coordinator, Mr. Peter Sinclair, has been appointed for Van Buren County as of January 1, 1989. The inspector intended to meet with him, but a schedule change by Mr. Sinclair made him unavailable.

Shift augmentation drills are continuing to be done on a quarterly basis. From a review of the drill data, it appeared that there was adequate and timely response to fulfill the minimum shift staffing requirements as listed in the SEP. The inspector recommended that a summary sheet be included for all drill reports. This could serve as

a brief synopsis of which positions were not filled within the 30 and 60 minutes time limit, who didn't respond to the call, incorrect phone numbers, etc.

Based on the above findings, this portion of the licensee's program was acceptable.

d. Training

The reduction of lesson plans from 26 to 12 was recently completed. This change allows certain emergency response positions in the TSC and EOF to receive the same training since the positions are similar. Previously there were separate training sessions for each location. Dose assessment courses now include one problem each quarter which may be completed on a self-study basis. An instructor is available if the student needs help on this assignment.

Seventeen names were selected at random for various emergency response positions to determine whether these individuals had received all the courses required for the position and had been trained on an annual basis. A review of training records from the licensee's computer based data determined that all 17 were current and complete in EP training. Interviews were conducted with one Shift Supervisor, one Engineering and Maintenance Support Group Leader (TSC position), and one OSC Director. All demonstrated good understanding of their position and were cognizant of their contributions to the overall emergency response effort.

The annual Radiological Monitoring Drill was conducted in November, 1989. Another is planned in June, 1989 as preparation for the July, 1989 emergency exercise. The semi-annual Health Physics Drills were conducted in December, 1988, and March 13, 1989. Critiques were held after each of these drills.

The medical drill was conducted on May 18, 1988, with South Haven Community Hospital, the licensee's primary hospital. Two injured contaminated employees were part of the scenario. A review of the conclusions and critique did not identify any major problems. One comment was that more communications were needed between the hospital staff and the HP technician in the trauma room.

Based on the above findings, this portion of the licensee's program was acceptable.

e. Independent Reviews/Audits

The annual independent audit of the EP program was conducted from July 25-29, 1988. The prior one was from June 22-26, 1987. A second EP review was made from August 15-19, 1988 and focused on the corporate level or General Office Emergency Planning.

The plant audit did not identify any findings; however, five observations, which are of a lesser significance, were identified.

One of these was a statement that in reviewing training records, four individuals who were not specified in the General Office Emergency Planning Augmentation list, were listed in the General Office Training Matrix. These four individuals did not receive controller training. The resolution agreed upon between the Training Department and EP was to eliminate separate controller training. This type of training has now been incorporated into drill training and any EP related subjects. This solution appears to be satisfactory and eliminates a special training class without diluting the input needed. One meaningful comment in the audit reports was a suggestion that an update be made on evacuation time studies for both the Palisades and the Big Rock Point Plant. At present these studies and tables are based on 1980 population data. This suggestion should be carefully considered for action in the not too distant future, i.e., within a year. The part of the audit that included an evaluation of the adequacy of the licensee's interface with the State of Michigan and Van Buren, Allegan, and Berrien Counties was completed between June 7 and November 8, 1988. Distribution of the audit included the three counties and the State of Michigan.

Based on the above findings, this portion of the licensee's program was acceptable.

5. Status of TMI Safety Issues Management System (SIMS) Items

On October 31, 1980, the NRC issued NUREG-0737, which incorporated into one document all TMI-related items approved for implementation by the Commission at that time. On December 17, 1982, the NRC issued Supplement 1 to NUREG-0737 to provide additional clarification regarding Regulatory Guide 1.97 (Revision 2), "Application to Emergency Response Facilities and Meteorological Data," as well as other areas. The status of the completion of these TMI SIMS items are internally tracked by the NRC. The below listing provides the status of the SIMS items related to emergency preparedness.

III.A Current Status: Closed

This item has been determined to be no longer applicable, and has been administratively closed.

III.A.1.1 Current Status: Closed

This item involved short term improvements to the emergency preparedness program and was closed at the conclusion of the Emergency Preparedness Implementation Appraisal: Report No. 50-255/81-19 dated December 3, 1981.

III.A.1.2.1 Current Status: Closed

This item involved interim upgrades to the ERF's and was closed at the conclusion of the Emergency Preparedness Implementation Appraisal: Report No. 50-255/81-19 dated December 3, 1981.

- III.A.1.2.2 Current Status: N/A
- This item involved design criteria for upgraded ERFs, but was subsequently determined to be not applicable (N/A).
- III.A.1.2.3 Current Status: Closed
- Because this item involved ERF modifications that were incorporated into MPA-F-63, 64, and 65, this item was closed based on the Emergency Preparedness Implementation Appraisal: Report No. 50-255/81-19 dated December 3, 1981.
- III.A.2.1 Current Status: Closed
- This item involved the submittal of upgraded emergency plans. This item was closed with the issuance of the SER: Report No. 50-255/83-12 dated September 8, 1983.
- III.A.2.2 Current Status: Closed
- This item involved the submittal of emergency procedures. This item was closed at the conclusion of the Emergency Preparedness Implementation Appraisal: Report No. 50-255/81-19 dated December 3, 1981.
- III.A.2.3 Current Status: Closed
- This item involved an acceptable interim meteorological program. This item was closed at the conclusion of the Emergency Preparedness Implementation Appraisal: Report No. 50-255/81-19 dated December 3, 1981.
- III.A.2.4 Current Status: Closed
- This item has been determined to be no longer applicable and has been administratively closed.
- III.A.2.5 Current Status: Closed
- This item has been determined to be no longer applicable and has been administratively closed.
- III.A.2.6 This item has been determined to be no longer applicable and has been administratively closed.
- III.A.2.7 Current Status: N/A
- This item required the licensee to provide a description of the Class B meteorological model to the NRC. Based on the current structure of the ERF Appraisal program, the NRC is not reviewing submittals of the Class B model. Therefore, this item is not applicable (N/A).

III.A.2.8 Current Status: Closed
This item has been determined to be no longer applicable and has been administratively closed.

MPA-F-63 Current Status: Open
This item involves a review of the TSC during a future inspection.

MPA-F-64 Current Status: Closed
This item involved a review of the OSC, which was completed during the exercise: Report No. 50-255/87012(DRSS) dated June 19, 1987.

MPA-F-65 Current Status: Open
This item involves a review of the EOF during a future inspection.

MPA-F-66 Current Status: N/A
This item involved the Nuclear Data Link, which has been superseded by the Emergency Response Data System (ERDS). Therefore, this item is not applicable (N/A).

6. Exit Interview

The inspector held an exit interview on May 12, 1989 with those licensee representatives denoted in Section 1 of this report. The inspector summarized the scope and findings of the inspection. The quality of the emergency response program has continued to improve. Management support has been very good, and a positive, receptive attitude was observed from individuals contacted during the inspection.

The licensee indicated that none of the matters discussed were proprietary in nature.