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UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

AUG 21 1975

Wisconsin Public Service Corporation
ATTN: Mr. E. W. James, Senior Vice President
Power Generation and Engineering
P.O. Box 1200
Green Bay, Wisconsin 54305

Docket No. 50-305

Gentlemen:

This refers to the inspection conducted by Mr. B. L. Jorgensen of this office on July 15-17 and 24, 1975, of activities at the Kewaunee Nuclear Power Plant authorized by NRC Operating License No. DPR-43 and to the discussion of our findings with Mr. Lange and others of your staff at the conclusion of the inspection.

A copy of our report of this inspection is enclosed and identifies the areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, interviews with plant personnel, and observations by the inspector.

During this inspection, it was found that certain of your activities appear to be in violation of NRC requirements. The items and references to the pertinent requirements are listed under Enforcement Items in the Summary of Findings Section of the enclosed inspection report.

This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office within twenty days of your receipt of this notice, a written statement or explanation in reply, including: (1) corrective steps which have been taken by you, and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved. Such a statement or explanation should be provided for each of the items listed.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this notice, the enclosed inspection report, and your response to this notice will be placed in the NRC's Public Document Room. If this report contains any



[Handwritten signature]

AUG 21 1975

Wisconsin Public Service
Corporation

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information that you or your contractors believe to be proprietary, it is necessary that you make a written application to this office, within twenty days of your receipt of this notice, to withhold such information from public disclosure. Any such application must include a full statement of the reasons for which it is claimed that the information is proprietary, and should be prepared so the proprietary information identified in the application is contained in a separate part of the document. Unless we receive an application to withhold information or are otherwise contacted within the specified time period, the written material identified in this paragraph will be placed in the Public Document Room.

Certain other items identified during this inspection require further action. These items are identified and referenced under Other Significant Items (B) in the Summary of Findings section of the enclosed inspection report. In your response, please advise us of the action you have taken or plan to take, showing the estimated date of completion, with regard to each item.

Should you have any questions concerning this inspection, we will be glad to discuss them with you.

Sincerely yours,

Gaston Fiorelli, Chief
Reactor Operations Branch

Enclosure:
IE Inspection Report No.
050-305/75-13

bcc w/encl:
PDR
Local PDR
NSIC
TIC

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Emergency Planning Inspection

IE Inspection Report No. 050-305/75-13

Licensee: Wisconsin Public Service Corporation
P.O. Box 1200
Green Bay, Wisconsin 54305

Kewaunee Nuclear Power Plant
Kewaunee, Wisconsin

License No. DPR-43
Category: C

Type of Licensee: PWR (W)

Type of Inspection: Routine, Unannounced

Dates of Inspection: July 15-17 and 24, 1975

Principal Inspector: *B. L. Jorgensen*
B. L. Jorgensen

8/15/75
(Date)

Accompanying Inspector: None

Other Accompanying Personnel: None

Reviewed By: *Jesse A. Pagliaro*
Jesse A. Pagliaro
Senior Environmental Scientist
Environmental and Special Projects
Section

8/20/75
(Date)

SUMMARY OF FINDINGS

Inspection Summary

Inspection performed on July 15-17, and 24, (75-13): Reviewed documentation related to compliance with emergency planning requirements; examined selected emergency facilities, equipment and supplies; discussed actual emergency events and drills, training, and offsite coordination; reviewed observation of emergency drill by NRC Resident Inspector. Three items of noncompliance were noted relating to licensee adherence to required frequencies for fire brigade training, fire brigade drills, and for communications checks with offsite support agencies. One deviation was identified pertaining to licensee failure to ensure that offsite support agencies have a clear understanding of their assigned responsibilities.

Enforcement Items

Deficiencies

- A. Contrary to the requirement of Technical Specification 6.4.a.9, the licensee did not adhere to the stipulations of Administrative Control Directive 13.2 for a monthly frequency of training meetings for the plant fire brigade, in that since January, 1974, such meetings were documented only in March and May, 1974. This deficiency was identified by the inspector. (Paragraph 7, Report Details)
- B. Contrary to the requirements of Technical Specification 6.4.a.9, the requirement of Administrative Control Directive 13.2 stipulating a quarterly frequency of training drills for members of the plant Fire Brigade was not adhered to during the period from January 1974 to the time of this inspection. Available documentation establishes the conduct of such drills only in July 1974. This deficiency was identified by the inspector. (Paragraph 9, Report Details)
- C. Contrary to the requirements of Technical Specification 6.4.a.9, the requirement of Administrative Control Directive 13.4 stipulating a monthly communications check with off-site agencies was not adhered to during the period from January 1974 to the time of this inspection. Available documentation establishes communications checks only with the office of the Kewaunee County Sheriff. This deficiency was identified by the inspector. (Paragraph 3.c, Report Details)

Licensee Action on Previously Identified Enforcement Items

No previously identified enforcement items within the scope of this inspection.

Other Significant Items

A. Systems and Components

The licensee's evaluation of the coverage of the Gai-Tronics communications system under operational noise level conditions has been completed.^{1/} The licensee has determined that coverage is not adequate in certain portions of the plant and has initiated changes to provide for use of sirens as the primary emergency notification system with the Gai-Tronics as a backup. (Paragraph 4.d, Report Details)

B. Facility Items (Plans and Procedures)

One unresolved item was identified pertaining to licensee compliance with procedural requirements dictating a monthly frequency for inventory of emergency kits. (Paragraph 4.a, Report Details)

Three items requiring further action were identified as follows:

1. Emergency Plan implementing procedures currently contain some incorrect, out-of-date, or incomplete information. (Paragraph 8, Report Details)
2. Training and orientation related to the Kewaunee Emergency Plan has not been provided to all primary offsite agency personnel whose assistance may be needed in the event of an emergency. (Paragraph 3.b, Report Details)
3. Procedural controls do not exist for specifying and auditing a minimum availability of medical equipment and supplies in the ambulance and first aid rooms. (Paragraphs 4.b and 4.c, Report Details)

C. Managerial Items

No significant items identified.

D. Noncompliance Identified and Corrected by Licensee

None within the scope of this inspection.

1/ R. O. Inspection Rpt No. 050-305/74-04.

E. Deviations

Contrary to the commitment of the licensee in Section III-A of the Kewaunee Emergency Plan to ensure proper coordination of offsite agencies in the event of an emergency, the licensee has not updated letters of agreement with these agencies nor provided offsite agency personnel with training. (Paragraphs 3.a and 3.b, Report Details)

F. Status of Previously Reported Unresolved Items

No previously reported unresolved items within the scope of this inspection.

Management Interview

A management interview was conducted with Messrs. Lange, Jarvela and Ristau at the conclusion of the inspection on July 17, 1975, and via telephone with Mr. Richmond on July 24 and August 5, 1975. The following items were discussed with the licensee representatives.

- A. The NRC inspector summarized the scope and intent of this specific inspection. (Paragraph 2, Report Details)
- B. The items of noncompliance were reviewed and discussed, as were the deviation and the unresolved item. (Paragraphs 3.a, 3.b, 3.c, 4.a, 7 and 9, Report Details)
- C. Licensee actions on two items remaining open following a previous inspection were reviewed and discussed. (Paragraph 4.d and 8, Report Details)
- D. The NRC inspector noted the neglect of frequent contact with offsite agencies to maintain current information, and the absence of licensee training for some of these agencies. (Paragraphs 3.a and 3.b, Report Details)
- E. The inspector and the licensee representatives discussed means to improve inventory control for first aid supplies and for the contents of the ambulance. (Paragraphs 4.b and 4.c, Report Details)
- F. The licensee's experience in exercising emergency procedures in actual and simulated events, and the observation of a practice exercise by the NRC Resident Inspector, were discussed. (Paragraphs 10 and 11, Report Details)

REPORT DETAILS

1. Persons Contacted

Kewaunee Nuclear Plant Personnel

R. Lange, Assistant Superintendent - Maintenance
J. Richmond, Technical Supervisor
J. Krueger, Shift Supervisor
G. Jarvela, Health Physics Supervisor
G. Larsen, Radiochemistry Supervisor
D. Ristau, Training Supervisor
M. Reinhart, Senior Radiation Technician

Off-Site Personnel

W. Sperry, Administrator, Two Rivers Hospital
F. L. Weld, M. D., Doctors Clinic, Two Rivers, Wisconsin
R. Smith, Kewaunee County Sheriff's Office
G. Wanish, Manitowoc County Sheriff
K. Nelleson, Chief Deputy Sheriff, Manitowoc County
R. Loncar, RO-1, U. S. Coast Guard, Two Rivers, Wisconsin
Capt. W. Deguire, Commanding Officer, District #3, Wisconsin
State Police
J. Huston, M. D. Wisconsin Electric Power Company
O. Schultz, Chief, Kewaunee Volunteer Fire Department
D. C. Boyd, USNRC Resident Inspector

2. General

The inspection at the Kewaunee Nuclear Power Plant conducted on July 15 through 17, 1975, consisted of an examination of the licensee's implementation of plans, procedures and activities related to the Kewaunee Emergency Plan approved May 1, 1972. Certain off-site support agencies were visited or contacted, and selected emergency facilities, equipment and materials were inspected. The Emergency Plan, its implementing procedures, and the Technical Specifications were used as the primary inspection criteria.

3. Agreements and Coordination With Offsite Agencies

The inspector visited or contacted representatives of offsite agencies as indicated in the Persons Contacted portion of this inspection report. The discussions centered on the degree of involvement, frequency of contact, participation in licensee-sponsored training or drills, and the level of understanding of the respective agency's role in emergency support.

a. Letters of Agreement

Sections II.E and II.F and Table II-1 of the Kewaunee Emergency Plan delineate offsite agencies or officials who may be called on for emergency assistance. The inspector examined letters of agreement currently on file with the licensee, noting the following:

- (1) The most current letters are dated January, 1974. The inspector noted that changes in offsite agency personnel and the passage of time (18 months) without licensee recontact has resulted in the licensee failing to meet his FSAR emergency plan commitment to ensure adequate coordination with offsite support groups.
- (2) No letters were available in the licensee's file from the medical facilities nor from a physician knowledgeable in handling radiation accident patients. Both licensee representatives and offsite personnel indicated that such agreements have been made and in this case offsite personnel were cognizant of and well versed in, their potential emergency roles.

b. Training

Training of offsite personnel has been directed at the physicians and nursing staff of the hospital and at the Kewaunee Fire Department. Documentation indicating specific training of other agencies' personnel was not available. Provision for such training is to be made in accordance with item IV.H of Appendix E to 10 CFR 50.

c. Communications Check

The licensee's Administrative Control Directive 13.4 "Emergency Plan Training" dated November 2, 1973, dictates that a communications check with the outside agencies will be held monthly. With the exception of approximate semi-annual contacts for the purpose of announcing or arranging drills, only the office of the Kewaunee County Sheriff has received the required communications checks. The County Sheriff's office is subject to a daily radio check. The licensee's failure to adhere to the requirements of this Administrative Control Directive is in noncompliance with the requirements of Technical Specification 6.4.a.9.

4. Facilities and Equipment

The inspector examined selected emergency facilities, equipment, materials and procedures for their maintenance in a ready condition.

a. Emergency Kits

Results of required monthly inventories of emergency kits contents were not available for review. The licensee representatives indicated that these inventories had been performed as required, but documentation could not be located at the time of this inspection. This item remains to be resolved at a subsequent inspection.

The emergency kits were found not to contain a copy of the licensee's emergency procedures as indicated on the contents checklist. The licensee stated that revisions to several of these procedures are underway and that the procedures had been intentionally removed while this revision process is completed. A copy of existing emergency procedures was available at the Site Emergency Center.

b. Ambulance

Examination of the ambulance maintained at the site by the licensee showed that several of the items noted on an informal checklist were not present in the ambulance. The licensee stated that these had been removed for use in demonstrations conducted at a recent monthly Plant Safety Meeting and would be returned in the near future.

The inspector noted that previous inventories of ambulance contents had been conducted on an irregular schedule. The licensee stated that responsibility for performing this inventory was being transferred from Health Physics to Maintenance personnel. The licensee expects this change to improve the regularity of inventory because mechanical maintenance is currently on a regular schedule and inventories will be made concurrent to this maintenance. This item will be examined in a subsequent inspection.

c. First-Aid Supplies

The inspector noted that specified minimum inventories of first aid supplies and means for checking and maintaining such minimums had not been developed at the time of this inspection. The licensee stated that they believed such inventories and procedures should be developed, and stated that a checklist and frequency would be prepared. This item will be examined in a subsequent inspection.

d. Communications In-Plant

At the time of the most recent Emergency Planning inspection^{2/} the licensee had not completed functional testing of the Gai-Tronics inplant communications system under operating plant noise levels. This testing has been completed and the results were reviewed by the inspector. The licensee had determined that there exist areas in the plant, particularly in the turbine building, in which the Gai-Tronics system is either not audible or not understandable. The licensee has consequently initiated procedural changes which will designate a plant siren system for primary emergency assembly notification with the Gai-Tronics system being used for verbal announcements as a back-up in those areas where it can be understood. Licensee evaluation of the siren system has also been completed, with the licensee finding that this system is audible and understandable at all plant locations.

5. Instruments for Monitoring the Release of Radioactivity

a. Radiological Instrumentation

The inspector's examination of equipment and records pertaining to continuous liquid and gaseous effluent monitors and to portable instrumentation verified that these items are operable, and have been calibrated and maintained as required. These systems have not been changed since the previous inspection.

b. Meteorological Instrumentation

Instrumentation providing wind speed and direction and temperature parameters is located on a meteorological tower on the Kewaunee site. This instrumentation now reads into the Kewaunee Plant control room, providing wind speed and direction at the 35 and 180 foot levels, temperature at the 180 foot level, and delta T between the 35 foot and 180 foot levels.

c. Other Decisional Aids

The licensee maintains copies of the KNPP Emergency Plan, emergency procedures, call lists, personnel accountability lists, site maps, and various monitoring, analytical and communications equipment for use in an emergency in the Shift Supervisor's office and the site Emergency Center. In addition to developing changes to emergency procedures, the licensee changes site area maps by updating them as demography changes. Personnel accountability lists are maintained current.

^{2/} R. O. Inspection Rpt No. 050-305/74-04.

6. Medical Arrangements

a. Onsite

The inspector examined the onsite personnel decontamination facility and first aid rooms. These facilities were found to be located and supplied in accordance with the general descriptions of the Kewaunee Emergency Plan and to be in a ready condition. As noted above, the licensee stated detailed checklists for first aid supply maintenance would be prepared.

b. Offsite

The licensee maintains an ambulance onsite for transporting accident victims to offsite medical treatment facilities. A frequent mechanical check and maintenance program is followed to keep the ambulance in good mechanical operating condition at all times. The Kewaunee Emergency Plan specifies Two Rivers Hospital as the primary offsite treatment facility, with additional assistance available from hospitals in Milwaukee or Madison for treatment of long-term radiation casualties. No letters of agreement from any of these hospitals were on file with the licensee, as noted and discussed above. A special emergency treatment room has been constructed at the Two Rivers Hospital by Wisconsin Electric Power Company, operators of the Point Beach Nuclear Plant, Units 1 and 2. The licensee has contracted for availability of this facility to licensee personnel with Wisconsin Electric Power and the hospital.

7. Training

Current training and retraining of plant personnel was discussed with licensee representatives. The licensee has recently established the position of Training Supervisor, who will have the responsibility for all licensee personnel training programs. To date, the major activities of this position have been the completion of licensed operator requalification training.

Documentation of training programs and activities which have been carried out was reviewed by the inspector. Training activities required by Technical Specifications procedural controls are monthly fire brigade training (Administrative Control Directive 13.2, December 11, 1973) and semi-annual emergency plan training for all plant staff (Administrative Control Directive 13.4, November 2, 1973). The licensee has completed the semi-annual training as required. This training has been accomplished as part of the regular monthly Plant Safety Meetings. The inspector noted that the documentation is not always sufficiently specific in its identification of items discussed.

Documentation of licensee conduct of monthly fire brigade training indicates that, during the period from January, 1974, to the date of this inspection, such training was conducted only in March and May, 1974. Licensee failure to adhere to the requirements of Administrative Control Directive 13.2 is an item of noncompliance with Technical Specification 6.4.a.9.

The licensee has provided first aid training to most plant personnel via the eight-hour Red Cross Multi-media Course, and two senior fire brigade personnel have been provided intensive training through a contractor.

8. Implementing Procedures

The inspector discussed and reviewed with licensee representatives the status of ongoing or proposed changes to implementing procedures pertinent to the Kewaunee Emergency Plan. The primary focus of these changes will be to consolidate the primary Emergency Plan implementing procedures as Administrative Control Directives.

During his review of the existing procedures, the inspector noted that in several instances existing Administrative Control Directives are out of date, contain errors, or reference other procedures which have been changed or which no longer exist. The licensee representative was aware of these inconsistencies and stated that they were one reason for the modifications contemplated.

The inspector also noted that Administrative Control Directive 12.2, which was previously noted^{3/} as containing alpha contamination limits without a specified surface area being given, had not been changed. The Health Physics procedure detailing conduct of the specific surveys has been changed to specify an area. The licensee representative stated that this modification would be incorporated in the revised procedure.

9. Tests and Drills

The licensee has completed conduct of off-site emergency drills as required. The inspector discussed results of these exercises with licensee personnel and reviewed critique documentation. Followup actions on identified problem areas were also reviewed. The licensee has experienced communications problems between the Site Emergency Center and radiological monitoring teams under certain weather conditions. A licensee representative stated that the monitoring teams would be briefed on locations which had been identified as possible "dead" areas, and given instructions before entering these areas.

3/ Ibid.

Administrative Control Directive 13.2, dated December 11, 1973 specifies a quarterly frequency for conduct of drills for the plant fire brigade. The licensee had no documentation to verify conduct of these drills from January 1974 to the time of this inspection, except for two joint drill sessions with the Kewaunee Volunteer Fire Department conducted in July, 1974. One actual fire to which the fire brigade responded also occurred in this period. The licensee's failure to adhere to the requirements of Administrative Control Directive 13.2 is an item of noncompliance with Technical Specification 6.4.a.9.

10. Observation of Tests and Drills

The licensee conducted an emergency drill involving coordination with certain offsite agencies and including a simulated evacuation of certain offsite sectors on June 2, 1975. The NRC Resident Inspector observed the conduct of this drill at the Site Emergency Center. The licensee's responses were determined to be in accordance with the Emergency Plan and implementing procedures, and were timely and orderly. Appropriate personnel responded as planned. A critique of offsite activities was held immediately following this drill with the participation of the offsite agency representatives. In addition, licensee personnel held an inplant critique a short time later. The NRC Resident Inspector was present at both critiques.

In addition to the site area communications problems mentioned above, the licensee identified problems in the use of certain portable instruments directly below high voltage transmission lines. Corrective action possibilities are being considered for this area. Finally, some offsite communications checks were not successful. The licensee has initiated changes to update call lists to correct this difficulty.

11. Responses in Actual Emergencies

The NRC inspector discussed with licensee personnel, and reviewed logs pertaining to, actual events which have occurred in which implementation of portions of the Emergency Plan or certain emergency procedures would have been appropriate. These have consisted of a few typical industrial accidents involving personnel injuries without radioactive contamination, and one fire. The licensee's documentation is insufficiently detailed to enable a determination as to whether all procedures were carried out as planned, though the documentation which does exist reflects actions in accordance with prepared procedures. Licensee personnel stated that they believed, particularly in the case of the fire, which was controlled in a few minutes, that existing procedures had been well adhered to.