

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-266/88007(DRSS); 50-301/88007(DRSS)

Docket Nos. 50-266; 50-301

Licenses No. DPR-24; DPR-27

Licensee: Wisconsin Electric Power Company  
231 West Michigan  
Milwaukee, WI 53201

Facility Name: Point Beach Nuclear Power Plant, Units 1 and 2

Inspection At: Point Beach Site, Two Creeks, Wisconsin

Inspection Conducted: March 7-11, 1988

Inspectors: *James E. Foster*  
James E. Foster  
Team Leader

*3/29/88*  
Date

*James P. Patterson*  
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*3/29/88*  
Date

Approved By: *William Snell*  
William Snell, Chief  
Emergency Preparedness  
Section

*3/29/88*  
Date

Inspection Summary

Inspection on March 7-11, 1988 (Reports No. 50-266/88007(DRSS);  
No. 50-301/88007(DRSS))

Areas Inspected: Routine, unannounced inspection of the following areas of the Point Beach Nuclear Power Plant emergency preparedness program: action on previous Open Items; activations of the licensee's Emergency Plan; LER Review; operational status of the emergency preparedness program; emergency detection and classification; protective action decisionmaking; notifications and communications; shift staffing and augmentation; knowledge and performance of duties (training); licensee audits; and handling of Information Notice 87-58. This inspection involved two NRC inspectors.

Results: No violations, deficiencies or deviations were identified.

## DETAILS

### 1. Persons Contacted

- \*J. Zach, Plant Manager
- \*R. Bruno, Superintendent Training
- \*P. Dent, Supervisor, Staff Service
- J. Knorr, Regulatory Engineer
- \*D. Stevens, Emergency Preparedness Coordinator
- \*R. Chojnacki, Quality Specialist
- \*C. Krause, Licensing Project Engineer
- \*D. Schoon, Engineer
- J. Smith, Training Specialist
- M. Baumann, Engineer-II, Corporate
- T. Slack, Nuclear Specialist-III
- W. Hermann, Superintendent of Maintenance & Construction
- E. Lange, Health Physics Supervisor
- T. Garot, Duty Shift Superintendent
- M. Reiff, Duty Technical Assistant
- Z. Laplant, Nuclear Engineer
- \*R. Leemon, NRC Resident Inspector
- \*R. Hague, NRC Senior Resident Inspector

\*Denotes those attending exit interview.

### 2. Licensee Actions on Previously Identified Open Items

- a. (Open) Open Item (266/87018-01; 301/87018-01): During the last exercise, there was poor coordination between the Operations Support Center (OSC) and the Health Physics Control Point. This was due to lack of definitive command and control of the OSC organization. Licensee personnel indicated that the relevant procedures have been reviewed and changes proposed to clearly define command and control for these areas. This item will remain open pending demonstration in an exercise.
- b. (Closed) Open Item (266/87018-02; 301/87018-02): Exercise Weakness: during the last exercise, the Medical Drill portion of the exercise was inadequate. The licensee has reviewed the rescue team procedures and medical training for personnel. On the basis of the findings of this review, it was decided to upgrade the onsite medical response capability by additional training and an increased number of medical drills. Six such medical drills were planned for 1987, and five were actually conducted. Licensee records indicated a large increase in the number of onsite personnel trained in first aid. In addition, it was determined that those evaluating medical drills would be required to be first aid qualified (via multimedia first-aid course).

On March 16, 1988, the licensee held an emergency plan drill to demonstrate onsite first aid and offsite objectives pertaining to medical services. The scenario called for a contaminated, injured

man in the auxiliary building requiring offsite medical assistance and subsequent transportation to the local hospital. The drill was observed by the Senior Resident Inspector. Immediate first aid was appropriately administered at the scene of the injury. The on-site medical assistance team arrived at the injured man's location within 10 minutes, providing a stretcher, first aid kit, trauma kit, and oxygen. Due to the nature of the simulated injuries, the injured man was not moved until the arrival of off-site assistance. All actions of the medical assistance team were appropriate and timely. This item is closed.

- c. (Open) Open Item (266/87018-03; 301/87018-03): At times, during the last exercise, information flow from the Technical Support Center to the other facilities was inadequate. No specific licensee actions were identified to address this item, and none were felt required. This item will remain open pending demonstration in an exercise.
- d. (Open) Open Item (266/87018-04; 301/87018-04): During the previous exercise, various problems were observed in the Emergency Operations Facility due to inadequate staffing. A number of licensee actions have been initiated to address this item (see item below). This item will remain open pending adequate demonstration in an exercise.
- e. (Open) Open Item (266/87018-05; 301/87018-05): During the previous exercise, it was observed that the Emergency Operations Facility needed redesign and updating. Licensee personnel have contacted other plants and visited two other EOFs to ascertain the current state-of-the-art in EOF equipment and layout. Proposals for revised EOF equipment (including telefax and copy machines) and facility layouts are under consideration. Licensee personnel indicated a tentative September, 1988, completion goal for this effort. This item will remain open.

### 3. Activations of the Licensee's Emergency Plan

On June 19, 1987, an unplanned discharge of radioactive liquid to Lake Michigan took place at 0846 hours, as indicated by an "alert" alarm on a discharge monitor. A "high" alarm of the discharge monitor occurred at 0851 hours, and an Unusual Event was declared at 0922 hours. The basis for the classification was a calculation estimating that 235 gallons of liquid had been released to the lake, exceeding Technical Specification requirements. Because the release had been terminated approximately 25 minutes prior to event classification and the discharge monitor was no longer alarming, the Unusual Event was declared and terminated at the same time.

On August 16, 1987, an apparent lightning strike to a transmission line near the site (or to the ground near the site) caused a loss of electrical load to Point Beach Unit 2. The loss of load caused a subsequent turbine trip and reactor trip. The lightning strike occurred at approximately 1855 hours, and an Unusual Event was declared at 1935 hours. The event was terminated at 2005 hours on the same date.

On November 5, 1987, between 2204 hours and 2350 hours, five helicopters flew over the Point Beach site at low levels. Efforts to identify the aircraft were unsuccessful, and Federal Aviation Administration (FAA) officials initially contacted were unaware of any such planned flights. At 0035 hours on November 6, an Unusual Event was declared based on unusual aircraft activity over the site. The Unusual Event was declared and terminated at the same time, as the unusual activity had ceased.

On November 21, 1987, an unplanned actuation of the Safety Injection System (with injection to the reactor vessel) took place at 0312 hours. The cause of this event was the failure of a pressurizer spray valve resulting in excessive spray in the pressurizer, and reactor coolant system depressurization followed by initiation of Safety Injection. Safety Injection flow to the vessel began when system pressure reached 1483 PSIG, and continued for approximately 22 minutes. An Unusual Event was declared at 0331 hours. The event was terminated at 0457 hours on the same date.

On October 17, 1987, a contractor employee working on the Unit 2 "B" steam generator became dizzy and fainted. The worker had been working in a contaminated area, utilizing anti-contamination clothing and supplied air. As a result of anti-contamination clothing removal, the individual had slight amounts of radioactive contamination of the face, hair and socks. He was transported to the Two Rivers Community Hospital and decontaminated. This event was not classified as an emergency event, per the wording of the licensee's Emergency Action Level (EAL) scheme. The Emergency Plan provides for an Unusual Event classification for offsite transportation of a contaminated and seriously injured individual whose hospitalization is expected to exceed 48 hours. This wording is considerably more restrictive than the guidance in NUREG-0654, which provides for such a classification on "transportation of a contaminated injured individual from site to offsite hospital".

Documentation related to each event had been collected, reviewed, and analyzed to determine if actions met those required by the Emergency Plan. A summary of the analysis, including an introduction, actions taken, and recommendations for corrective actions or improvements were included in the package. Action items had been assigned tracking numbers and had been placed on the Emergency Preparedness "punchlist" tracking system.

During the inspection, a review was performed of Licensee Event Reports (LERs) to determine if events had been properly classified per the EAL Scheme. The following LERs were reviewed:

<u>LER#</u>	<u>Unit</u>	<u>Brief Description</u>
87-001	1	Manual Reactor Trip During EOL Physics Testing
87-002	1	Containment Integrated Leak Rate Exceeds Tech. Specs.
87-003	1	Containment Isolation Valve Leakage Exceeds Tech. Specs.
87-004	1	Loss Of Red Instrument Bus During Battery Cell Change

87-005	1*	Reactor Trip, Safety Injection (Spray Valve Failure)
88-001	1	Single Failure Potential, 4160V Switchgear
87-001	2	Steam Flow Minimum Redundancy Below Tech. Specs.
87-002	2*	Loss of Load Reactor Trip Due To Lightning
87-003	2	Main Steam Isolation Valves Open Without Trip Power
87-004	2	Degraded Steam Generator Tubes
87-005	2	Turbine Runback Caused By Dropped Control Rod
87-006	2	Potential Loss of Containment Integrity, Misadjusted Valve

\*Denotes Unusual Events

All LERs were found to be properly classified as either not falling under an Emergency Action Level or as an Unusual Event.

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

a. Emergency Plan and Implementing Procedures (Also 82204)

The inspector verified that both emergency plan changes and emergency plan implementing procedures (EPIPs) were being reviewed and approved at appropriate management levels. Emergency plans and EPIPs sent to the NRC, whether to Region III or Headquarters, are considered uncontrolled copies, since they are inaccessible to audit and control by the licensee's administrative branch, Staff Services. Actual distribution of the NRC copies as well as those sent to the State of Wisconsin, Emergency Services, Kewaunee County, Manitowoc County, and the NRC Resident Inspector's office are as uncontrolled copies sent via the corporate office. There is no way for plant personnel to verify that these plans and procedures were distributed within 30 days after being issued by the licensee. The Staff Services Branch and the EP Coordinator should be made aware of the timeliness of these distributions to the NRC as well as to State and County emergency services.

Based on the above findings, this portion of the licensee's program was acceptable; however, the following item should be considered for improvement:

- The licensee's corporate office should provide a copy of the distribution dates of uncontrolled copies of changes to the emergency plan and EPIPs to the Supervisor, Staff Services and the EP Coordinator. This list should include distribution dates for NRC copies.

b. Readiness of Facilities

The TSC and OSC were toured by the inspectors and appeared to be in an adequate state of operational readiness.



c. Organization and Management Control (Also 82204)

The licensee emergency organization and procedures were largely unchanged from the last inspection. One individual has been added to the emergency organization, and plant personnel advised that they will be assuming responsibility for coordination with the federal Superfund (Superfund Amendment Reauthorization Act) and for Meteorological data review.

The Emergency Preparedness Coordinator maintains a computer based database (EP "Punchlist") of unique and repetitive items. Repetitive items include actions involved with program maintenance, such as communication checks, semiannual and quarterly meetings. Unique items include exercise and drill critique items, NRC Exercise Weaknesses, Open Items, Items for Improvement, licensee audit items, corrective actions from actual plan activations, Institute for Nuclear Power Operations (INPO) Open items, and Federal Emergency Management Administration (FEMA) findings. Items were being tracked by source, priority, due date, status, group or individual assigned.

d. Emergency Preparedness Training (Also 82206)

Current training requirements, as listed in the Point Beach Emergency Plan (EP) require EP training annually only for "key" plant personnel and personnel assigned specific duties associated with the Emergency Plan. This program provides annual training only for substantive changes in the EP and EIPs to these key plant personnel. All other plant personnel with emergency response assignments only receive EP training every two years (biennially). Participation in drills is also required, once every two years. Thus, several important emergency support positions require only biennial training, such as the Chemistry Director, Health Physics Supervisor, etc..

The licensee does not consider participation in an annual emergency exercise as a part of training. Some phase of EP training, whether it be classroom, drills, critiques of EP activities, or table-top discussions, should be conducted annually to maintain capabilities and state-of-the-art for all emergency response personnel. This is an Open Item (No. 266/88007-01).

A review of EP training records was conducted for 19 individuals with emergency response positions. All had met the training requirements as specified in the Emergency Plan. Among the individuals interviewed regarding their emergency response positions were one Chemistry Director, one Health Physics Supervisor, and one Operational Support Director. All demonstrated good emergency response skills and capabilities to perform their assigned emergency functions. Also, a walkthrough with a Duty Shift Supervisor and Duty Technical Advisor was conducted.

In addition, the inspectors monitored two EP training courses, one for hospital nursing personnel, and one onsite for Dose assessment. Both were thorough and well presented.

Licensee personnel provided training for nursing personnel potentially involved in the handling of radioactively contaminated patients on the evening of March 7, 1988. One inspector attended and evaluated this training presentation. The training was informative and well presented, and appeared appropriate for the personnel in attendance. Proper emphasis was placed on the basic hazards of radiation, radioactive contamination control, and their relative importance when lifesaving actions are needed.

The inspector confirmed through documentation review that the required drills for Health Physics and Radiological Monitoring including demonstration of post-accident sampling were conducted within the required frequency. Post accident sampling and chemistry drills were conducted monthly to accommodate all those required to be trained for this emergency response assignment. The annual Medical Drill, as performed in the September 1987 exercise, was considered unacceptable. A repeat drill has been scheduled for March 16, 1988. All drills performed in this inspection period have been critiqued. Any recommendations or suggestions to improve the drills have been incorporated into the EP training program with the concurrence of the EP Coordinator.

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

e. Independent Reviews/Audits (Also 82210)

The licensee annually performs two audits of emergency preparedness, one addressing training, and one addressing the overall function of the program. The audit of emergency preparedness training was performed during February 3-4, 1988, and the program audit is scheduled to be performed in September, 1988.

Audit No. A-P-88-02, "PBNP Emergency Plan Training Audit, was reviewed. The audit was performed by two engineers from the (corporate) Nuclear Quality Assurance Department. The auditors reviewed general overview training, specialized training for specific functions, and off-site agency training. The audit concluded that the emergency preparedness training program is well developed and sufficiently documented to meet training requirements. No deficiencies were noted in the audit report, but three comments for improvement of the program were included.

10 CFR 50.54(t) requires that the portions of the annual independent audit dealing with the adequacy of offsite interfaces be made available to State and local agency personnel. Documentation was available to substantiate that State and local agency personnel had

been advised of the availability of the 1986 and 1987 annual independent audits via letters of January 20, 1987 and April 28, 1987.

Documentation indicated that Appendix "B" (Emergency Action Level tables) were provided to the State of Wisconsin for review and comment on January 20, 1987. Licensee personnel indicated that the next EAL review would follow distribution of a pending revision to the EAL tables.

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

5. Emergency Detection and Classification (82201)

One team consisting of a Duty Shift Supervisor (DSS) and a Duty Technical Advisor (DTA) were interviewed regarding general emergency preparedness knowledge and requested to classify several hypothetical scenarios utilizing the Emergency Action Level scheme. Both were knowledgeable of generic emergency preparedness theory and philosophy, and were readily able to accurately classify scenarios presented to them.

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

6. Protective Action (82202)

The DSS and STA interviewed above were knowledgeable regarding the procedures for formulating a protective action recommendation and notifying appropriate agencies. They were also aware that the utility can only recommend protective actions which, if accepted, are implemented by the State.

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

7. Notifications and Communications (82203)

The procedures for notification to the NRC and offsite agencies have been separated into two separate procedures. EPIP 2.1 is for notifying the NRC, while EPIP 2.2 is for notifying the State and local governmental agencies. The licensee has a self-imposed goal of 30 minutes to contact the NRC Duty Officer, instead of the required one hour. A worksheet from EPIP-14, Communications, is also followed. After the licensee's communicator makes his initial call to the NRC Duty Officer, the communicator asks the NRC Duty Officer to call back the plant on a separate phone number which would be held open for NRC status updates. This added step should improve communication lines with the NRC.



A test of the Emergency Notification System (ENS) in the Control Room, TSC and nearby NRC office at 4:00 p.m. on March 10, 1988, indicated a circuit fault, which was reported to the HQ duty officer and promptly fixed. It was discovered that an oversight had been made and the ENS in the NRC room adjacent to the TSC had not been included in the testing schedule. This was very promptly rectified by adding the phone to the testing list. The procedure was revised by the morning of the next day. Documentation indicated that the required communication checks had been performed on the ENS phone in the TSC.

Monthly and annual communications tests were conducted as required, including those agencies within the ingestion pathway (50 miles EPZ).

All required communications drills, whether monthly or yearly, were conducted satisfactorily as verified by documentation. In addition, unannounced notification drills are conducted monthly. These notification drills included a preplanned message and were intended for the County agencies and the State agency. These were conducted on the NAWAS lines and occur on off-hours work shifts. These drills have proven to be an excellent tool to get the State and county levels of emergency response personnel involved in the system. Reception capabilities and any weak points in the communication system can be determined. This is a commendable addition to improving communications with off-site agencies.

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

8. Shift Staffing and Augmentation (82205)

Minimum shift staffing was confirmed by the inspector as being maintained as stipulated in Section 5.0, Figures 5-3 through 5-6, of the Emergency Plan. These four figures as represented, specify which emergency response positions are activated for each emergency classification.

A shift augmentation drill was conducted on February 9, 1988. Some procedural errors were identified. These occurred when the Duty and Call Superintendent misunderstood Section 5.1 of EPIP 3.1, Notifications. He erroneously notified three other positions before he notified the Emergency Support Manager. The critique following the drill identified this error and other areas of concern as voiced by the participants. A table-top drill was held later to clarify the steps in EPIP 3.1.

Pager response was determined to be 97%, up from a 64% response in a June, 1987 drill. Documentation on the shift augmentation drill/pager drill was detailed and thorough in its coverage.

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

9. Licensee Action on Information Notice 87-58

The licensee's procedures for distribution and review of NRC Information Notices were reviewed and discussed with licensee personnel. The present status of NRC Information Notice IN 87-058 "Continuous Communications Following Emergency Notifications" was also ascertained.

Section 2.2.3 of Wisconsin Electric Power Company procedure QP 16-3 "Operating Experience Review Program" (Revision 2, dated January 8, 1988) addresses the distribution, tracking and evaluation of NRC Information Notices (IN). Two copies of each IN are made, with one copy going to the corporate office, and one going to the Point Beach plant. A "scoping" review is immediately done, and documented, to identify information notices which could require immediate actions.

By procedure, an IN is routed to the Superintendent, Nuclear Plant Engineering, and the Point Beach Plant Manager. A memo is generated, indicating the evaluation of the IN, and recommending action if appropriate. This memo is sent to the Plant Manager, and if the proposed resolution is agreed upon, either the IN is closed (if no action required), or the required action is tracked for completion and the IN closed when action is completed. If the resolution is not agreed upon, further evaluation is done, and the resolution may be revised before resubmittal. The Superintendent of Training gets copies of all INs and related actions.

Each IN is tracked via a computerized database which tracks the IN number, dates of submittals, system entry, components involved, assigned group, assigned engineer, and completion date.

Discussion indicated that Information Notice IN 87-058 has not yet been formally evaluated per procedure QP 16-3, but it has gone through the staff "scoping" review, and no immediate need for action was identified.

Licensee procedures do not directly address the issue of how continuous communication with the NRC would be maintained during an accident, if the NRC requested that the someone remain on the phone. Discussion with licensee personnel and a review of procedures indicated that communication with the NRC is delegated to the Duty and Call Superintendent, then the Duty Technical Assistant, and then the Duty Shift Supervisor, if no others are available. If hourly updates (to the NRC) were not satisfactory, one of these personnel would be responsible for continuous communication. It was indicated that the intent is to call in additional personnel for this function. It was recommended that the relevant Implementing Procedure (EPIP 3.1) be revised to specifically address this situation.

10. Exit Interview (30703)

The inspectors met with the licensee representatives denoted in Section 1 on March 11, 1988. The inspectors summarized the scope and results of the inspection and discussed the likely content of the inspection report. The licensee did not indicate that any of the information disclosed during the inspection could be considered proprietary in nature.