

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-266/89025(DRS); 50-301/89024(DRS)

Docket No. 50-266; 50-301

License No. DRF-24; DRP-27

Licensee: Wisconsin Electric Power Company
231 West Michigan Avenue, Room 308
Milwaukee, WI 53201

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

Inspection At: Two Rivers, Wisconsin

Inspection Conducted: August 14-18 and September 15, 1989

Inspector: *Jeff Holmes*
Jeff Holmes

10/11/89
Date

Approved By: *Ronald N. Gardner*
Ronald N. Gardner
Plant System Section

10/11/89
Date

Inspection Summary

Inspection on August 14-18 and September 15, 1989 (Reports No. 50-266/89025(DRS);
No. 50-301/89024(DRS))

Areas Inspected: Routine unannounced safety inspection conducted to review the implementation of the licensee's fire protection program including a followup of licensee actions on previous inspection findings. The inspector utilized inspection modules 64704 and 92701.

Results: Of the areas inspected, no violations were identified.

Strengths observed in the licensee's program consisted of:

- Knowledge of fire protection systems by the fire protection officer and fire protection engineer appeared to be good.
- Housekeeping in safety-related areas appeared to be good.

No weaknesses in the licensee's required program were observed. Although not a regulatory requirement, the inspector was concerned with the storage of combustibles in the turbine building.

DETAILS

1. Persons Contacted

Wisconsin Electric Power Company (WE)

- ²J. Zack, Manager, PBNP
- ^{1,2}G. Maxfield, General Superintendent of Operations
- ^{1,2}D. Bell, Project Engineer
- ¹G. Frieling, Superintendent of Nuclear Systems Engineering
- ^{1,2}P. Glessner, Fire Protection Engineer
- ^{1,2}M. Kaminski, Fire Protection Officer
- ¹T. Staskal, Operations Engineer

U.S. Nuclear Regulatory Commission (NRC)

- ¹C. Vanderniet, Senior Resident Inspector
- ²J. Gadzala, Resident Inspector

¹Denotes those present during the August 18, 1989 exit meeting.

²Denotes persons participating by telecon in the exit interview on September 15, 1989.

2. Routine Fire Protection Program

The inspector reviewed, on a sample basis, the licensee's administrative procedures and fire protection surveillances. The inspector also walked down several fire protection systems. The results of the inspector's review are as follows:

a. Fire Protection System Surveillances

The licensee's fire protection program requires that the licensee test fire protection equipment and systems that are included in regularly scheduled station operating surveillance procedures. The inspector selected a sample of the licensee's completed surveillance procedures for review. During the review, the inspector determined the following:

(1) Smoke Detection System Integrity Surveillance Test

The licensee's bimonthly smoke detector system integrity test procedure, TS-77, Revision 5, is utilized to verify the integrity and standby operability of the smoke detection system. The inspector reviewed the completed bimonthly smoke detector integrity test procedures for February and April, 1989. The licensee identified some minor discrepancies and initiated a work request to correct the discrepancies. During this review, no unacceptable items were noted.

(2) Fire Door Surveillance Test

The inspector reviewed the semiannual safe shutdown area fire door inspection surveillance test dated June 13, 1989. The inspector observed that several minor deficiencies were identified by the completed surveillance procedure. The surveillance procedure indicated that maintenance work requests were written. Based on the work requests, no unacceptable items were noted.

(3) Bimonthly Halon 1301 Fire Suppression System Surveillance Test

The licensee's bimonthly halon 1301 fire suppression system surveillance test was developed by the licensee to "ensure standby operability of the halon 1301 fire suppression system."

The inspector reviewed the bimonthly halon 1301 fire suppression system surveillance test dated February 6, 1989, and April 7, 1989. No discrepancies were identified.

(4) Annual Fire Pump Capacity Test

The licensee's annual fire pump capacity test procedure, TS-72, Revision 6, was developed to ensure that the fire pumps are performing satisfactorily and are providing an adequate water supply for fire suppression systems and fire fighting activities.

The inspector reviewed the annual fire pump test results for the electric fire pump (July 1986, June 1987, and June 1988) and diesel fire pumps (July 1986, June 1987, and June 1988). The test results were found to be acceptable.

b. Fire Dampers

In a letter dated January 1, 1988, from C. Fay, WE, to the Document Control Desk, NRC, the licensee enclosed a technical evaluation regarding the airflow damper test. In Section 5.1 of the technical evaluation entitled "Installed Configurations," the licensee states, "The relative location of components in a ventilation system can affect the outcome of fire damper testing. The components to be considered are the fan, fire damper, inspection port and ventilation grill. By reviewing fire dampers installed at PBNP, we have determined that seven types of installed configurations exist." In Section 5.2, the licensee states, "We have evaluated the flow characteristics for each fire damper which is expected to close under normal air flow conditions. These characteristics are listed in Table FD-2. Since pressure drop across the damper has the major effect on damper closure capability, we conclude that if a damper of a given configuration has been successfully tested at a specific pressure drop, all dampers of the same configuration which are

subject to the same or lesser pressure drops will also be operable under normal air flow conditions."

The inspector reviewed the technical evaluation and identified the following concern:

In Section 5.4, the licensee addressed the different types of fire damper configurations with respect to orientation of the fan, access port and, in some cases, branch lines and vents. During the inspector's review of the configuration details, it did not appear that the licensee adequately considered the venturi effect caused by the closing of the fire damper. The venturi effect creates a partial vacuum which may prevent the fire damper from closing. The inspector was concerned with the venturi effect that resulted when the access ports were not fully closed under test conditions. The licensee acknowledged the inspector's concern and indicated that it would be addressed as part of their review of Information Notice 89-52.

c. Personnel Required for Safe Shutdown and Fire Fighting Activities

In the event of a disabling fire which requires evacuation of the Point Beach 1 and 2 control rooms when both units are operating, it would be necessary to provide sufficient personnel to shut down both operating reactors and provide manual fire fighting capabilities. The inspector reviewed this issue as follows:

(1) Safe Shutdown Personnel

The licensee developed Abnormal Operation Procedure 10A entitled "Control Room Inaccessibility" which required three operators, independent of the fire brigade, to achieve stable hot shutdown conditions. An evacuation of the control room due to a fire would require, at a minimum, the duty shift superintendent, control operator No. 1 and control operator No. 2.

(2) Fire Brigade

Licensee procedure PBNP 4.3, "Operations Personnel Assignments and Scheduling," indicates that a minimum complement of five qualified fire brigade members are maintained at all times. The licensee indicated the minimum composition of the fire brigade for all shifts is as follows:

Duty Operating Supervisor	Fire Brigade Leader
Primary Auxiliary Building Operator	Fire Brigade Member
Turbine Hall Operator No. 1	Fire Brigade Member
Turbine Hall Operator No. 2	Fire Brigade Member
Health Physics Personnel	Fire Brigade Member

Conclusion

The inspector reviewed records to demonstrate that the three personnel required to implement the safe shutdown procedure and

the five personnel required for the fire fighting activities were available for three shifts on July 4-5, 1989. Based on the licensee's documentation, the inspector verified that the appropriate composition of personnel for implementation of the abnormal operation procedure and the fire brigade was available.

d. Fire Brigade Drill

On August 17, 1989, a fire drill was conducted that simulated a fire in a warehouse located onsite. The fire brigade leader and fire brigade personnel were at the fire drill location in a timely manner with appropriate protective clothing and equipment. The fire brigade leader did a good job in sizing up the fire and directing his men to attack the fire. The fire brigade personnel also did a good job in performing their duties. After the drill a critique was conducted and was found to be satisfactory.

e. Plant Tour

The inspector toured several areas of the Unit 1 and Unit 2 reactor buildings and turbine building. During this tour, the inspector visually observed several hose stations, extinguishers, sprinkler valves, emergency lights, and housekeeping. The inspector observed that housekeeping in the reactor buildings, in general, was good. The inspector informed the licensee that improvement in housekeeping is warranted in the turbine building and the reactor building facades. The licensee acknowledged the inspector's concerns.

4. Exit Interview

The inspector met with licensee representatives at the conclusion of the inspection on August 18, 1989, and summarized the scope and findings of the inspection. Also, on September 15, 1989, a conference call was held between the licensee's representatives and the inspector. The inspector discussed the likely content of this report and the licensee did not indicate that any information discussed during the inspection could be considered proprietary in nature.