

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-266/85-01(DRS); 50-301/85-01(DRS)

Docket Nos. 50-266; 50-301

Licenses No. DPR-24; DPR-27

Licensee: Wisconsin Electric Power Company
231 West Michigan
Milwaukee, WI 53203

Facility Name: Point Beach Units 1 and 2

Inspection At: Point Beach Nuclear Plant Site
Two Creeks, WI

Inspection Conducted: January 2-17, 1985

Inspector: *P. R. Wohld*
P. R. Wohld

February 25, 1985

Date

Approved By: *L. A. Reyes*
L. A. Reyes, Acting Chief
Operational Programs Section

2/26/85
Date

Inspection Summary

Inspection on January 2-17, 1985 (Report No. 50-266/85-01(DRS); 50-301/85-01(DRS))

Areas Inspected: Routine announced inspection of licensee action on previous inspection findings; pump and valve inservice test program; and pump and valve testing. The inspection involved a total of 61 inspector-hours onsite and 24 inspector-hours offsite by one NRC inspector, including 15 inspector-hours onsite during offshifts.

Results: Of the three areas inspected, no items of noncompliance or deviations were found in two areas, one item of noncompliance was identified in the remaining area (uncalibrated equipment used for surveillance testing - Paragraph 4.f.).

DETAILS

1. Persons Contacted

- *F. A. Flentje, Supervisor, Staff Services
- W. J. Herrman, Superintendent, Maintenance and Construction
- *R. E. Link, Superintendent, Engineering, Quality and Regulatory Services
- *G. J. Maxfield, Superintendent, Operations
- *S. W. Pullins, ISI Engineer
- *G. R. Sherwood, Engineer, Nuclear Operations

*Denotes those attending the exit interview held on January 17, 1985.

Additional plant technical and administrative personnel were contacted by the inspector during the course of the inspection.

2. Action on Previous Inspection Findings

(Closed) Open Item (266/82-20-01; 301/82-20-01): Inservice testing program approval. The second ten year test interval program submittals and relief requests have not yet been approved by NRR. Inspection of the licensee's program under current commitments to the first ten year program indicates satisfactory program implementation.

3. Pump and Valve Inservice Testing Program

The licensee's pump and valve inservice test program implementation was reviewed to verify compliance with Appendix B of 10 CFR 50; 10 CFR 50.55a(g); and Subsections IWP and IWV of Section XI of the American Society of Mechanical Engineers' (ASME) Boiler and Pressure Vessel Code (1974 edition with addenda through Summer 1975). The inspection included review of administrative and surveillance procedures for inservice testing; review of test results and documentation; and observation of performance testing of plant service water, safety injection, and motor-driven auxiliary feedwater pumps.

The licensee had not received approval from the Nuclear Regulatory Commission for Code testing exception requests in its second ten year test interval program submittal (per 10 CFR 50.55a(g)); hence, the licensee has continued testing in accordance with the first ten year test program. This inspection was based on implementation of the test program with exceptions as approved under the first ten year interval and the Code edition noted above.

The inspector found that the licensee had fully implemented the program and was conducting pump and valve inservice tests in accordance with appropriate schedules and approved test procedures. Both pump and valve testing were generally well defined with the appropriate evaluation of collected data being performed by the licensee's staff. Licensee personnel contacted were notably cognizant of Code inservice test requirements and have implemented an effective program. Operations personnel directing and

conducting the surveillance tests were well trained, understood plant and equipment requirements, and conducted their activities in a professional manner. A review of maintenance activities that complement inservice testing in ensuring pump and valve component reliability indicated a need for improvement in this area. The licensee indicated that the maintenance procedures were being developed to address those concerns identified by the NRC.

Detailed areas of inspection and findings are discussed in the following paragraphs.

4. Pump and Valve Testing

The inspector was favorably impressed with the licensee's surveillance program; however, there were areas which require additional attention:

a. Valve Stroke Timing

An inquiry of licensee personnel indicated that valve stroke timing techniques met the latest ASME Code requirements; however, the necessary procedural details were not expressed clearly in the implementing procedures. Licensee personnel indicated they would initiate the necessary instructions and/or procedural changes to ensure that valve timing techniques were properly specified. The inspector has no further question on this item.

b. Pump Operability Determination

The inspector noted that pump test criteria were not available in the test procedures, but that test data was later evaluated against appropriate criteria by an engineer in the Operations group. The licensee agreed to make the minimum operability criteria available in the control room and perform initial operability determinations on shift. Completion of this change and subsequent inspector review is considered an open item (266/85-01-01(DRS); 301/85-01-01(DRS)).

c. Essential Service Water Pump Testing

Testing of essential service water pumps, done in pairs, were marginally adequate to detect developed head degradation at the levels intended by the Code. If better testing techniques cannot be developed, a Code testing relief request appears in order. The licensee indicated that the issue would be evaluated and appropriate action taken. Additionally, periodic inspection and overhauls were not established for these pumps that would otherwise ensure their good condition. This is considered an unresolved item pending action by the licensee and further evaluation by the inspector (266/85-01-02; 301/85-01-02(DRS)).

d. Pump Recirculation Flow Testing

The inspector noted that pump test procedures were not adequate to ensure that pumps under test are protected by miniflow. The licensee

understood the inspector's concern and will consider additional or better measures to ensure that pump miniflow protection is in effect when pumps are started without other flow paths available.

e. AC Motor-Operated Valve Surveillance

The inspector expressed concern that the Code requirements for valve stroke timing are extremely poor for detecting AC motor-operated valve degradation other than total failure to stroke. The maintenance supervisor indicated that preventive maintenance procedures are under development and that valves would be included in that process. Since the licensee meets the Code requirements for surveillance and has preventive maintenance procedures under development, the inspector has no further questions at this time.

f. Control of Measuring and Test Equipment

During the review of several inservice testing surveillance test procedures, the inspector noted that none of the procedures reviewed required the use of calibrated stopwatches where needed. In addition, the licensee stated that they do not have procedures in place to calibrate or check the accuracy of their stopwatches. Failure to require calibrated equipment for surveillance testing is considered to be an item of noncompliance with 10 CFR 50, Appendix B, Criterion XII, (266/85-01-03(DRS); 301/85-01-03(DRS)).

g. Maximum Allowed Valve Stroke Time

The inspector noted that the maximum allowable stroke time allowed for a given valve was generally the system response time or other time limit extracted from the plant technical specifications, FSAR, etc. The time limit was not necessarily chosen to be indicative of component operability or degradation. In some cases, when no system response time has been specified in the FSAR or Technical Specifications, no valve stroke time limit has been specified.

The question of what criteria are appropriate for selecting maximum valve stroke times is a generic one. Region III has initiated a request to NRR regarding the interpretation and appropriateness of choosing various values for maximum allowable stroke times for given valves. Determination of the acceptability of maximum allowable stroke times will be tracked as an open item pending receipt of an answer from NRR (266/85-01-04(DRS); 301/85-01-04(DRS)).

h. Pump Vibration Monitoring

The inspector verified that pump vibration monitoring met all Code requirements, but that improvements should be considered in this area: (1) monitoring vibration of the drive motor, (2) using velocity or acceleration measurements instead of, or in addition to, mils displacement, (3) measuring axial vibration, and (4) periodically observing pump vibration frequency spectrums for signs of change and impending component failure. The licensee noted the inspector's

comments in this area and is considering some of these improvements. The inspector has no further questions on this item.

i. Local Valve Position Indication Verification

The Code requires that valves with remote position indication be observed at least once every two years to verify that valve operation is accurately indicated. The licensee has been performing this verification but inadvertently dropped a number of valves from this requirement during a procedure change. The licensee personnel committed to have the procedure corrected within a month and to verify valve position indication by the next scheduled valve surveillance test. This is considered an open item pending completion of the licensee's commitment and review by the inspector (266/85-01-05(DRS); 301/85-01-05(DRS)).

j. Inservice Testing Records

The inspector noted the licensee was accumulating and evaluating test data in a timely manner. The data was recorded and presented so that trends and degradation can be readily identified. Inspection of the records also indicated that the licensee had an effective pump and valve surveillance program. Some improvements and a need to document the source of valve stroke criteria were discussed with the licensee. The licensee noted the inspector's comments and indicated that improvements are being made. The inspector has no further questions on this item.

No other items of noncompliance or deviations were identified.

5. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items disclosed during the inspection are discussed in Paragraphs 4.b., 4.g., and 4.i.

6. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 4.c.

7. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) on January 17, 1985, to discuss the scope and findings of the inspection. The licensee acknowledged the statements made by the inspector with respect to items discussed in the report.