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

REGION III

Reports No. 50-266/81-01; 50-301/81-01

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, WI

Inspection Conducted: January 2-30, 1981

RFW for
Inspectors: W. G. Guldemond Feb. 13, 1980

RFW for
R. L. Hague Feb. 13, 1980

RF Warnick
Approved By: R. F. Warnick, Chief, Feb. 13, 1980
Reactor Projects Section 3

Inspection Summary

Inspection on January 2, 5-9, 12-16, 19-23, and 26-30, 1981 (Reports No. 50-266/81-01; 50-301/81-01)
Areas Inspected: Routine resident inspection of Operational Safety Verification, Monthly Maintenance Observation, Monthly Surveillance Observation, Followup on Licensee Event Reports, IE Bulletin and Circular Followup, Review of Plant Operations, Followup on Items of Noncompliance, Review of Procedures for Coping with ATWS, Followup for IE Bulletin No. 80-24, TMI Action Plan Requirements (Procedures/Staffing, Hardware Changes, Health Physics/Emergency Planning). The inspection involved a total of 210 inspector-hours onsite by two inspectors including 46 inspector-hours on off-shifts.
Results: No items of noncompliance or deviations from commitments were identified.

DETAILS

1. Persons Contacted

*G. A. Reed, Manager, Nuclear Power Division
*R. E. Link, Assistant to the Manager
T. J. Koehler, Operations Superintendent
J. C. Reisenbuechler, I&C Engineer
R. R. Weedon, Health Physicist
J. J. Zach, Superintendent Technical Services
*F. A. Zeman, Office Supervisor

The inspectors also talked with and interviewed members of the Operations, Maintenance, Health Physics, and Instrument and Control Sections.

*Denotes personnel attending exit interviews.

2. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of January. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of both auxillary buildings and turbine buildings were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the month of January, the inspector walked down the accessible portions of the emergency diesel, auxillary feed water, and safety injection systems to verify operability.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under technical specifications, 10 CFR, and administrative procedures.

No items of noncompliance were identified.

3. Monthly Maintenance Observation

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with technical specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; and, fire prevention controls were implemented.

Work requests were reviewed to determine the status of outstanding jobs and to assure that priority is assigned to safety related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

Replacement of malfunctioning relays discovered during performance of 1CP 2.3 and 1CP 2.5-Surveillance Testing, 4D Diesel Generator, and Replacement of Reactor Protective System Relays.

Following completion of maintenance on the 4D diesel generator and replacement of reactor protective system relays, the inspector verified that these systems had been returned to service properly.

No items of noncompliance were identified.

4. Monthly Surveillance Observation

The inspector observed technical specifications required surveillance testing on the Reactor Protection and Safeguards Analog Channels I through IV, Reactor Protection system Logic, Safeguards System Logic, and Nuclear Instrumentation Power Range Channels N41, N42, N43 and N44 and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector also witnessed portions of the following test activity:

WMTP 9.2, Power Range Calibration Quarterly Axial Offset.

No items of noncompliance were identified.

5. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

LER NO.	TITLE
50-266/80-16	Failure of the 4D Diesel Generator Output Breaker to Shut
50-266/81-01	Loss of Safeguards Motor Control Center

Outstanding Unit 2 LER's were reviewed but none could be closed out.

No items of noncompliance were identified.

6. IE Bulletin Followup

For the IE Bulletin listed below the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presented in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

BULLETIN NO.	TITLE
80-21	Valve Yokes Supplied by Malcolm Foundry Company, Inc.

No items of noncompliance were identified.

7. IE Circular Followup

All outstanding circulars were reviewed and it was found that none could be closed out in this reporting period.

No items of noncompliance were identified.

8. Review of Plant Operations

During the month of January the inspector reviewed the following activities:

Review and Audits

On January 19, 1980, the inspector sat in on a safety review committee meeting. The inspector verified that provisions of

technical specifications dealing with membership, review process, frequency, and qualifications were met. The inspector also verified that decisions made were reflected in the meeting minutes and that corrective actions proposed were taken. During this meeting the staff was presented with and discussed a proposed organization change.

On January 27, 1981, the inspector witnessed an audit conducted by the licensee's offsite audit team and verified conformance with technical specifications and QA procedures. The audit covered storage of QA items, implementation of the preventive maintenance program, calibration of mechanical measuring devices, welder qualification; onsite QA coordinator activities, and previously identified open items.

No items of noncompliance were identified.

9. Followup on Items of Noncompliance

Licensee response to the inspection reports noted below was reviewed to ascertain that corrective actions for items of noncompliance were completed and in conformance with regulatory requirements.

50-266/80-20 - (Closed) Failure to Reset High Neutron Flux Setpoint. A procedure change clarifying the requirements has been issued.

50-266/80-20 &
50-301/80-20 - (Closed) Gatehouse Security. Procedural changes have been implemented.

10. Review of Procedures for Coping With ATWS Events

The inspector reviewed emergency procedures, annunciator alarm response instructions, special orders and standing orders in order to ascertain the status of procedures which would be required for coping with ATWS events. The following findings were made. All emergency procedures which are associated with or involve an automatic reactor trip contain instructions to either followup all automatic actions which did not occur with manual actions or verify that the required automatic actions have occurred. The annunciator response instructions direct the operator to the Emergency Shutdown procedure for all alarms associated with parameters which can initiate an automatic reactor trip. This procedure calls for manual followup of automatic actions which have failed. However, no procedure could be found which dealt specifically with an ATWS event. Discussions with several operating personnel lead to the conclusion that faced with such an event they would attempt manual trip, boration, and de-energization of the RCCA's.

As part of this inspection the inspector also reviewed the requirements for control and initiation of emergency boration. It was determined that emergency boration can only be initiated at the direction of the Duty Shift Supervisor. The rationale for this policy is that injection

of concentrated boric acid into the reactor coolant pump seal system could lead to solidification of the boric acid, blocking all seal flow to the pump or damaging the seal. Recognizing the significance of this, it is felt that the decision should be made by the Duty Shift Supervisor.

No items of noncompliance were identified.

11. Followup for IE Bulletin No. 80-24

The inspector reviewed facility status with respect to requirements communicated in IE Bulletin No. 80-24. The findings are grouped by the bulletin paragraph numbers.

Item 2.(a)(b): Each unit at Point Beach has two sumps in containment, Sump A and Sump B. Sump A is the sump used to collect leakage and drain it out of containment. Sump B is the sump used to accumulate leakage as a source of water to be used during the recirculation phase of safety injection.

The bottom of Sump A is at elevation - two feet. Its gravity drains through a three inch line to the auxiliary building sump. The drain line contains two valves in series outside containment. One of these valves is normally open. It can be operated from the control room and does receive a containment isolation signal. The other valve is normally shut. It has a spring return to closed switch on the control board and also receives a containment isolation signal.

Sump A contains a single Foxboro level transmitter which provides a narrow range level indication to the control board. The control board indication is 0 - 100% with a control board annunciated alarm at 80%. The sump is normally drained when the level alarm at 80% is received. This is accomplished by opening the normally shut valve described above for a specified period of time. The time has been established to allow the contents of the sump and the drain line to completely drain to the auxiliary building sump. For Unit 1 this corresponds to 23.5 gallons. For unit 2 this corresponds to 46.7 gallons.

Verification of flow from Sump A can be accomplished by two means. The first is by monitoring the narrow range level indication during the draining evolution. This is the normal method. The second method is to send someone down to the auxiliary building sump to check for water flowing from the Sump A drain line.

Sump A contains only the single level transmitter. This transmitter is on an annual calibration call up to satisfy the Technical Specification requirement for calibration each refueling. There are plans to add a single transmitter with a magnetic float and reed switch transducer by January 1, 1982.

Sump B is the eight foot level of containment (the containment floor). It is served by two float type level indicators which read out individually on the control board at three, five, seven and nine feet. These

level indicators receive calibration at the same frequency as the indicator for Sump A. As Sump B communicates directly with Sump A, all drainage would be accomplished through Sump A.

The inspectors verified the operability of the above described equipment by checking the control board indications, monitoring a Unit 1 Sump A drain, and reviewing surveillance test results.

In addition to the sump level indicators, there are other parameters logged and graphed to provide an indication of potential leakage. These include the containment air particulate monitor, the containment radiogas monitor, containment humidity, circulation water inlet temperature, the number of times per day Sump A is drained, and a calculated gross reactor coolant system leakage.

Item 2.(c): All of the monitors described above are subjected to required periodic surveillance testing. Operability of the Sump A drain valves is verified every time the sump is drained (normally once every two to three days). Graphing the parameters mentioned above daily provides a continuous trending of overall in-containment leakage. Additionally, biweekly containment inspections are conducted during reactor operations. Included in these inspections is a tour of the eight foot level-Sump B. Sump A is not accessible and therefore reliance must be made on the level indication. Drip pan leakage from the containment coolers flows to the keyway cavity which communicates directly with Sump A and does not appear in Sump B.

Technical Specification 15.3.1.D.7 requires, "When the reactor is in power operation, two reactor coolant leak detection systems of different operating principles shall be in operation, with one of the two systems sensitive to radioactivity. The systems sensitive to radioactivity may be out-of-service for 48 hours provided two other means are available to detect leakage." The methods of leakage detection are the same instruments described above whose paramenters are plotted daily. Thus, while it is one of the leak detection instruments, the Sump A level detector could be out-of-service with no effect on plant operation. This indication could be the only one to promptly detect a cold nonradioactive leak.

Item 2.(d): Based on the documented sensitivities of the leakage detection systems noted above and the fact that the information provided by these systems is logged and graphed, even small amounts of leakage can be promptly identified. This was graphically illustrated during the inspection. A small (approximately .1gpm) leak on one of the Unit 1 pressurizer spray valves resulted in draining Sump A two to three times a day vice a normal frequency of once every two to three days.

All fluid systems penetraing containment can be isolated to stop leaks.

Item 2.(e): The interim surveillance measures have been in effect for approximately 10 years.

Item 2.(f): There are presently no procedures which require that in-containment service water leaks be reported. However, the licensee has committed to make such reports.

Summary

There exists no surveillance deficiencies with respect to in-containment leak detection.

There is one system deficiency. That is that Sump A contains only one level detector. Failure of this detector could go unnoticed and preclude prompt identification of cold, nonradioactive (eg. service water) leakage. This deficiency is compounded by two additional factors. First, it is not known whether the Sump A level detector would function following submergence. Second, if the Sump A level detector were to fail and a large leak develop, the water level could rise to the three foot level in Sump B before indication was received. This corresponds to the 11 foot level in containment. Thus, the lower two feet of the reactor vessel could be submerged. Again the licensee has plans to add to the present Sump A level detector with a different type detector.

Periodic containment entry is continuing two times per month per unit as it has historically.

No items of noncompliance were identified.

12. Maintenance

Procedures and test results were reviewed for maintenance completed during the refueling outage. This review included verification that administrative approvals for removing the system were followed, that hold points for inspection/audit and sign off by QA or other licensee personnel were met, that provisions for testing following maintenance were provided and completed, that procedures for assuring that system valves, breakers, etc. are aligned for normal service were completed and that responsibility for reporting to licensee management details concerning design or construction related deficiencies identified during maintenance was assigned. Maintenance and testing of the following components were reviewed to verify that the above requirements were met.

a. Main Steam Line Isolation Valves.

b. Snubbers.

No items of noncompliance were identified.

During the technical specification required testing of snubbers, one was found to be inoperable due to loss of oil from its reservoir. The required further testing of 10% of that type snubber was accomplished. No other inoperable snubbers were identified.

13. TMI Action Plan Inspection Requirements

The inspectors reviewed licensee actions in accordance with Revision 1 of Temporary Instructions 2515/42, 43, and 44. The following tables present the current status of implementation of TMI Action Plan requirements called for by the referenced temporary instructions.

No items of noncompliance were identified.

14. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection period and summarized the scope and findings of the inspection activities. The licensee acknowledged these findings.

PROCEDURES AND STAFFING

TASK	SUBJECT	STATUS	TI 2515/42 REV. 1
I.A.1.1	STA INTERIM STAFFING	COMPLETE	
	LONG-TERM STA STAFFING	INCOMPLETE PER A NOVEMBER 3, 1981 LETTER FROM MR. C. W. FAY TO MR. H. R. DENTON AN EXTENSION TO THE 1/1/81 DEADLINE TO 3/1/81 WAS REQUESTED BASED ON THE INCREASED SCOPE OF TRAINING AND END OF YEAR SCHEDULAR PROBLEMS.	
I.A.1.2	SHIFT SUPERVISOR RESPONSIBILITIES	COMPLETE	
I.A.2.1	IMMEDIATE UPGRADING OF RO AND SRO TRAINING AND QUALIFICATIONS	COMPLETE	
I.C.2	SHIFT RELIEF/TURNOVER	COMPLETE. TURNOVER CHECKLISTS HAVE NOT BEEN IMPLEMENTED FOR I&C OR MAINTENANCE PERSONNEL.	
I.C.3	SHIFT SUPERVISOR RESPONSIBILITIES	COMPLETE	
I.C.4	CONTROL ROOM ACCESS	COMPLETE	
I.C.5	PROCEDURE FOR OPERATING EXPERIENCE FEEDBACK	COMPLETE	
II.F.2 ITEM 1	IDENTIFICATION OF AND RECOVERY FROM CONDITIONS LEADING TO INADEQUATE CORE COOLING	ADEQUATE INTERIM EQUIPMENT AND PROCEDURES ARE INSTALLED. THE FINAL SYSTEM IS EXPECTED TO BE INSTALLED EARLY IN 1982 AS PART OF THE AUXILIARY SAFETY INSTRUMENTATION PANEL.	

HARDWARE CHANGES

TASK	SUBJECT	STATUS
		TI 2515/43 REV. 1
II.D.3	DIRECT INDICATION OF RELIEF AND SAFETY VALVE POSITIONS	COMPLETE
II.E.1.2	AUXILIARY FEEDWATER SYSTEM AUTOMATIC INITIATION	COMPLETE
II.E.1.2	AUXILIARY FEEDWATER SYSTEM FLOW INDICATION	SAFETY GRADE INSTRUMENTATION HAS BEEN INSTALLED ON THE AUXILIARY FEED PUMP DISCHARGE LINES. THE TRANSDUCERS HAVE YET TO BE ENVIRONMENTALLY QUALIFIED. FLOW INDICATION MODIFICATIONS FOR EACH STEAM GENERATOR ARE INCOMPLETE. SOME EQUIPMENT HAS YET TO BE INSTALLED AND MOUNTING BRACKETS FOR TRANSDUCERS HAVE YET TO BE SEISMICALLY QUALIFIED.
II.E.3.1	RELIABILITY OF POWER SUPPLIES FOR NATURAL CIRCULATION	COMPLETE
II.E.4.1	DEDICATED HYDROGEN PENETRATIONS	NOT APPLICABLE
II.E.4.2	CONTAINMENT ISOLATION DEPENDABILITY	INSIDE CONTAINMENT ISOLATION VALVES ON THE LETDOWN AND SEAL RETURN LINES HAVE YET TO BE INSTALLED. THIS WORK IS NOT EXPECTED TO BE COMPLETED UNTIL THE SPRING OF 1983. THE SETPOINT FOR PRESSURE INITIATED CONTAINMENT ISOLATION REMAINS AT 6 PSIG PENDING COMPLETION OF AN ONGOING EVALUATION ON INSTRUMENT ACCURACY AND RANGE.
II.F.1	ADDITIONAL ACCIDENT MONITORING INSTRUMENTATION	ITEMS 1-5 ARE EXPECTED TO BE COMPLETE BY 1/1/82 ASSUMING EQUIPMENT DELIVERY OCCURS AS SCHEDULED. NO COMMITMENT HAS BEEN MADE FOR CONTAINMENT HYDROGEN MONITORING BASED ON THE LACK OF AVAILABILITY OF ENVIRONMENTALLY QUALIFIED EQUIPMENT.
II.G.1	POWER SUPPLIES FOR PRESSURIZER RELIEF VALVES, BLOCK VALVES AND LEVEL INDICATION	COMPLETE

HEALTH PHYSICS/EMERGENCY PLANNING

TASK	SUBJECT	STATUS
II.B.3	POST ACCIDENT SAMPLING	COMPLETE
II.F.1	INSTRUMENTATION FOR MONITORING ACCIDENT CONDITIONS	INTERIM MEASURES ARE IN EFFECT. INSTRUMENT RANGES ARE GENERALLY LESS THAN CALLED FOR BY NUREG 0737. ADDITIONAL EQUIPMENT IS ON ORDER.
III.A.1.2	UPGRADE EMERGENCY SUPPORT FACILITIES - SHORT-TERM	FACILITIES ARE AVAILABLE. HOWEVER, REMOTE PLANT MONITORING INSTRUMENTATION FOR THE TECHNICAL SUPPORT CENTER IS NOT EXPECTED TO BE OPERATIONAL UNTIL MARCH, 1981.
III.A.3.6	INTERACTION WITH OTHER AGENCIES	WILL BE DONE BY NRC EMERGENCY PLANNING TEAMS
III.D.3.3	INPLANT RADIATION MONITORING - INTERIM	COMPLETE