

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-266/94010(DRSS); 50-301/94010(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 Plant

Inspection At: Two Creeks, Wisconsin

Inspection Conducted: May 23-27, 1994

Inspectors: J.W. McCormick-Barger for
P. Louden
Radiation Specialist

6/9/94
Date

[Signature]
R. Hague
Senior Radiation Specialist

6/9/94
Date

Approved By: J.W. McCormick-Barger
J. W. McCormick-Barger, Chief
Radiological Controls Section

6/9/94
Date

Inspection Summary

Inspection on May 23-27, 1994 (Reports No. 50-266/94010(DRSS); 50-301/94010(DRSS))

Areas Inspected: Routine, announced inspection of the radiation protection program after a Unit 1 refueling outage including: audits and appraisals; training; shipping and transportation of radioactive waste; and maintaining occupational exposures as low as reasonably achievable (ALARA) (Inspection Procedures (IP) 83750, 84750, and 86750).

Results: The licensee's radiation protection program continued to be effective in controlling radiological work and in protecting the public health and safety. Doses continued on a downward trend with further initiatives planned for the fall 1994 outage. No violations were identified.

DETAILS

1. Persons Contacted

Wisconsin Electric Company

- * M. Baumann, Manager - Licensing
- * J. Becka, Operating Experience Coordinator
- * J. Bevelacqua, Manager - Health Physics
- * G. Casadonte, Fire Protection Coordinator
- W. Doolittle, Health Physics Specialist
- E. Epstien, Health Physics Specialist
- D. Evers, Chemist
- * F. Flentje, Regulatory Services Specialist
- * T. Guay, General Supervisor - Health Physics
- * J. McCullum, Security Supervisor
- P. Scheffel, Health Physics Technician Supervisor
- * J. Schweitzer, Manager - Maintenance
- S. Thomas, Health Physics Specialist

Nuclear Regulatory Commission

- * T. Kobetz, Senior Resident Inspector
- * J. Gadzala, Acting Senior Resident Inspector

The inspectors also interviewed other licensee and contractor personnel during the course of the inspection.

*Denotes those present at the exit meeting on May 27, 1994.

2. Audits and Appraisals (IPs 83750 and 84750)

The inspectors reviewed recent audits and in-field monitoring reports of activities during the spring 1994 refueling outage.

Audit A-P-93-20, "Health Physics Calibrations, Radiological Environmental Monitoring Program, Offsite Dose Calculations, Process Control Program, and ALARA" was reviewed and was found to contain thorough reviews of the programs audited. One unsatisfactory finding was noted with respect to liquid effluent alarm setpoints on the RE-219 and RE-222 circulating water blowdown monitors. The values listed in the Offsite Dose Calculation Manual were slightly less conservative than appropriate setpoint values. The station initiated a condition report in response to this finding and changes were made to the alarm setpoints of these monitors. The ALARA program was reviewed by a radiation protection supervisor from another Region III station and provided several observations which should be of benefit to the station's ALARA program.

Several in-field monitoring reports generated during the recently completed refueling outage were reviewed and found to be effective in

identifying radiological control problems at the job site. These observations were entered into a trending program which monitors overall performance in this area and should provide an early identification of emerging programmatic problems.

The licensee's audit and in-field monitoring program appeared to be effective in identifying problem areas in the radiological controls program.

No violations of NRC requirements were identified.

3. Training (IP 83750)

The inspectors reviewed recent changes in the station's training program provided to radiation protection technicians (RPTs). The station had enhanced its continuing training for RPTs to include individualized training for each RPT in areas of need for that individual. Training needs were identified through performance reviews conducted by radiation protection foremen and through each RPT's assessment of his own weaknesses. Feedback from this method of training was positive to date and appeared to be effective in enhancing the overall performance of the station's RPTs.

Another program recently initiated by the station was an enhanced form of pre-job briefings which the licensee refers to as "just-in-time" training. This training was conducted a few days before selected jobs to thoroughly review procedures and job scope with all workers involved in the activity. Such training was conducted for a radioactive waste shipment being made during the inspection (Section 4) and discussions from that meeting resulted in a time savings of 33 percent for the movement of the high integrity container (HIC) into the shipping cask.

Overall, the inspectors found the licensee's efforts in these areas to have been progressive in meeting the needs of RPTs and the general workforce with respect to radiological controls. These programs appeared to be very effective in enhancing radiological awareness and RPT performance.

No violations of NRC requirements were identified.

4. Shipping and Transportation of Radioactive Waste (IP 86750)

The inspectors reviewed paperwork and monitored loading of a radioactive waste shipment being performed during the inspection. Shipment number 94-31 contained approximately 5.7 curies (0.21 MBq) of a mixture of radioisotopic oxides on filter media. The waste classification was "C" and was shipped exclusive use low-specific-activity. The licensee used the RADMAN computer program for calculating all necessary parameters for proper shipping in accordance with Department of Transportation and burial site regulations. The inspectors reviewed the shipping papers, waste classification, and activity calculations and noted no problems.

The inspectors attended the pre-job briefing for the transfer of the HIC from the "pill box" (a shielded storage area in the Auxiliary Building) to the truck access area, a move of about 200 feet during which time the HIC would be unshielded. Radiation readings on the side of the HIC were approximately 10 R/hr. The briefing went very well with several individuals asking additional questions to clarify their particular role. Teams were sent out to post all access points to the spent fuel pool area including security guards to maintain a perimeter around the outside of the truck access. Public address system announcements were made to advise personnel to stay clear of the area during the lift and move of the HIC. A final sweep of the area was made to insure that no one had inadvertently entered or not heard the announcements. The spent fuel pool crane operator was provided with temporary shielding and video monitors at the point on the catwalk where he would spend most of his time trying to insert the HIC into the shipping container. During the move the HIC was unshielded for about 20 minutes.

The inspectors monitored the dose rates at posted access points during the move and found all readings to be well below the high radiation area limits with the highest reading of about 2 mr/hr. After the HIC was placed into the shipping container, the inspectors performed surveys to verify that the dose rates the licensee listed on the shipping documentation were correct. All readings were in agreement.

No violations of NRC requirements were identified.

5. Maintaining Occupational Exposures As Low As Reasonably Achievable (ALARA) (1P 83750)

The inspectors reviewed the licensee's improvements to their ALARA program, ALARA initiatives performed during the refueling outage, and future plans for the station's program.

The station recorded 65 person-rem (0.65 person-Sieverts) for the spring 1994 refueling outage which was below pre-outage estimates. This low exposure total was mainly attributed to the very limited steam generator work performed during this refueling outage and enhanced monitoring of work activities in the field by supervisors.

The inspectors reviewed the ALARA Action Plan and noted several additional action items due for completion in 1994. The two most significant contributors to outage dose were steam generator work and reactor vessel head work. Plans for the next refueling outage included very close attention to primary chemistry and the timing and duration of early boration and hydrogen peroxide addition. These efforts should help reduce dose rates in the steam generator channel heads. The licensee had ordered and expected delivery of reactor head shielding to be installed prior to performing reactor vessel head work. ALARA efforts appeared to be appropriately focused.

A source term reduction program procedure was scheduled to be in place by June 30, 1994. Cobalt replacement options were under engineering

review and a hot spot tracking and mitigation procedure was being revised. All of the items in the source term reduction action plan were presently scheduled for completion in 1994. Completion and effectiveness of these items will be reviewed in future inspections.

No violations of NRC requirements were identified.

6. Exit Interview

The inspectors met with licensee representatives (denoted in Section 1) at the conclusion of the inspection on May 27, 1994, to discuss the scope and findings of the inspection.

During the exit interview, the inspectors discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. Licensee representatives did not identify any such documents or processes as proprietary.