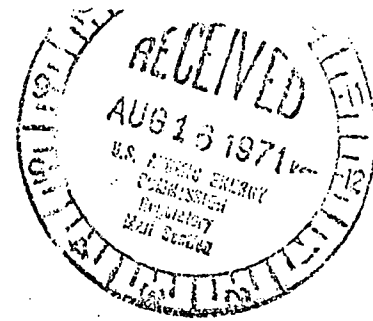




Wisconsin Electric POWER COMPANY
231 WEST MICHIGAN, MILWAUKEE, WISCONSIN 53201



August 11, 1971

Dr. Peter A. Morris, Director
Division of Reactor Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

Dear Dr. Morris:

ABNORMAL OCCURRENCE
FACILITY OPERATING LICENSE DPR-24
UNSCHEDULED RELEASE OF RADIOACTIVITY
POINT BEACH NUCLEAR PLANT
DOCKET NO. 50 - 266

This letter is to report the details of an abnormal occurrence at Point Beach Nuclear Plant which resulted in an unscheduled release of radioactivity from the plant on August 3, 1971. The release occurred when the Unit 2 refueling water storage tank overflowed to the Unit 2 facade sump during a filling operation, with subsequent release of radioactive liquid to the sewage retention pond. This occurrence was reported by telephone on August 3 to the Region III Compliance Office. No Limiting Conditions for operation were violated.

At 0900 on August 3, 1971, filling of the Unit 2 refueling water storage tank was commenced using the Unit 1 reactor makeup water tank as a water source. The initial refueling water storage tank level was 79% by control room indication. The refueling water storage tank had previously been borated from a boric acid tank which contained some recycled boric acid from Unit 1 operation. At 1130 it was noted that the refueling water storage tank level indication had stopped at 81%. The Auxiliary Operator who was sent to investigate found that the local indication was reading 100%, and the tank was overflowing to the Unit 2 facade drain trough. The Shift Supervisor was informed immediately and the filling was stopped.

The facade drain trough drains to the Unit 2 facade sump and, at the time of the occurrence, the sump pump discharge was lined up to the sewage treatment plant. Therefore, the overflow from the refueling water storage tank was ultimately released to the sewage retention pond.

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By reading the flow totalizer which indicates the quantity of makeup water used to fill the refueling water storage tank and comparing the initial and final level indications of the refueling water storage tank, it was calculated that approximately 6000 gallons of water overflowed the refueling water storage tank. An analysis of the residual water in the facade sump was made, and the following radioactivity levels recorded:

H^3 - 1.91×10^{-3} $\mu\text{Ci/ml}$,
Gross $\beta\gamma$ - 3.56×10^{-6} $\mu\text{Ci/ml}$,
 I^{131} - 3.31×10^{-6} $\mu\text{Ci/ml}$, and
 Co^{58} - 2.54×10^{-7} $\mu\text{Ci/ml}$.

The sump radioactivity concentrations were below the maximum permissible concentration requirements for release to a restricted area as listed in 10CFR20, Appendix B, Table I. The sump is considered a restricted area. For purposes of measuring the radioactivity concentrations for a release to unrestricted areas, a point at the inlet of the retention pond was chosen for sampling. This location is conservative as the actual release to the unrestricted environment is at the discharge of the retention pond. The tritium sample at the pond inlet point was 1.46×10^{-4} $\mu\text{Ci/ml}$, which indicated a dilution factor of 13 because of normal sewage discharge and "clean" floor drain dilution. Using this dilution factor, the calculated Iodine 131 concentration at this point was about 2.7×10^{-7} $\mu\text{Ci/ml}$. The first actual I^{131} sample at this point was 2.34×10^{-7} $\mu\text{Ci/ml}$. The analysis confirms that none of the isotopes discharged to unrestricted areas exceeded maximum permissible concentration as listed in 10CFR20, Appendix B, Table II. To fully insure that these values were not exceeded, a daily sample was taken at the inlet to the retention pond. The daily samples indicated a gradually decreasing radioactivity concentration, and by August 6 the concentrations at the retention pond inlet had returned to background levels.

The indication in the control room for the Unit 2 refueling water storage tank was found to be improperly calibrated. The level instrument should have been calibrated in a range of 0 - 800 inches, but in actuality it was calibrated for a range of 0 - 1000 inches. The local indication was correctly calibrated to the 0 - 800 inch range. The control room level instrumentation has been recalibrated for the proper range.

The radioactive concentrations in the retention pond are continually being diluted by normal plant sewage water and by "clean" sump drainage. No radioactive release in excess of maximum permissible concentration has or will be made as a result of this occurrence.

Very truly yours,
