



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



May 14, 1974

Mr. John F. O'Leary, Director
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. O'Leary:

DOCKET NO. 50-266
UNSCHEDULED RELEASE OF RADIOACTIVITY
POINT BEACH NUCLEAR PLANT

This letter is to report the details of an abnormal occurrence at Point Beach Nuclear Plant, Unit 1, Facility Operating License No. DPR-24, as defined by Section 15.1.a.C of the Technical Specifications. This written report is submitted in accordance with Section 15.6.6.A.2 of the Technical Specifications and follows a telephone report on the incident to Mr. K. R. Baker of Region III, Directorate of Regulatory Operations, on May 10, 1974, as required by Section 15.6.6.A.1 of the Technical Specifications.

At approximately 11:40 P.M. on May 9, 1974, R14, the auxiliary building stack monitor, alarmed at its setpoint during refueling activities of 4,000 counts per minute, indicating release of radioactivity.

An immediate check of plant conditions disclosed that the No. 2 gas decay tank pressure was 8 psig, down from the 31 psig registered in the log at 3:00 P.M. the same day.

The gas compressor, holdup tanks and other sections of the waste gas system were immediately isolated and a gas sample of the No. 2 gas decay tank was taken for later analysis. By 11:15 P.M. the auxiliary building gas monitor had returned to a normal reading and the isolated sections of the waste gas system were then separately returned to service and the leak path determined. This release was determined to have been caused by leakage in a 3/4 inch solenoid valve in the volume control tank vent line that was used to isolate this system during maintenance of the normally installed relief valve in the current refueling and maintenance outage.

8403270262 740514
PDR ADOCK 05000266
S PDR

Handwritten: 50-266
COPY SENT REGION 438411

On May 7, 1974, two days prior to this incident, the volume control tank was isolated, vented and all valves red-tagged to conduct maintenance repair of relief valve 1-209 on the primary system letdown line. This valve releases into the volume control tank, should the valve lift during plant operation. One of the boundary valves of the volume control tank closed and red-tagged for this operation was valve 1-258, a 3/4 inch solenoid-operated valve on the volume control tank vent line to the waste gas system vent header.

The relief valve, 1-209, was removed at approximately 12:00 P.M., May 9, at which time the slow loss of gas from No. 2 waste holdup tank, via the vent header, the leaking solenoid valve 1-258, and the open line at LRV-209 commenced. The closing of an additional valve in the volume control tank vent line, manual isolation valve 1-205B, successfully stopped the leakage at 11:50 P.M. the same day.

Calculations based upon the analysis of the gas decay tank and the period the auxiliary building gas monitor recorder indicated a discharge of gas above normal background for the auxiliary building, give the following results:

Average release rate over a 12 hour period	1.05×10^{-4} Ci/sec
Maximum release rate	1.6×10^{-4} Ci/sec
Average site boundary concentration	1.58×10^{-10} μ Ci/cc
Average release rate as a percentage of that permitted by the Point Beach Nuclear Plant Technical Specifications	0.053%

The composition of the release was as follows:

Isotope	Fraction	Activity Release, Ci	Xe-133 Equivalent, Ci
Xe-133	0.589	$2.651 \times 1 =$	2.651
Xe-131m	0.028	$0.126 \times 1 =$	0.126
Xe-133m	0.001	$0.005 \times 1 =$	0.005
Xe-135	0.002	$0.009 \times 3 =$	0.027
Kr-85	0.379	$1.706 \times 1 =$	1.706
Total		4.497	4.52

Mr. John F. O'Leary

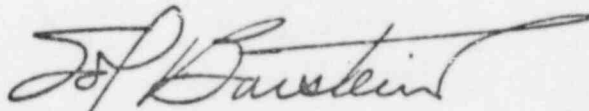
- 2 -

May 14, 1974

The release was continuously monitored by the auxiliary building stack monitor and the above calculated results show that the release was well below allowable limits as set by 10 CFR 20. Therefore, it is not considered that this occurrence posed a health or safety hazard to the public.

A review of this occurrence indicates that the use of manual isolation valve 1-205B or a similar valve 1-205A may have provided a more satisfactory boundary valve for isolation of the volume control tank rather than the solenoid valve used in this instance. This recommendation is being passed to the operating personnel as a guideline for similar maintenance operations in the future.

Very truly yours,



Sol Burstein

Executive Vice President

cc: Mr. James G. Keppler, Regional Director
Directorate of Regulatory Operations, Region III