



**Wisconsin Electric** POWER COMPANY

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March 30, 1983

Mr. J. G. Keppler, Regional Administrator  
Office of Inspection and Enforcement,  
Region III  
U. S. NUCLEAR REGULATORY COMMISSION  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

DOCKET NO. 50-266  
REACTOR COOLANT ACTIVITY LIMITATIONS  
POINT BEACH NUCLEAR PLANT, UNIT 1

This letter serves as notification of a reportable occurrence at Point Beach Nuclear Plant, Unit 1, in accordance with the Confirmatory Order of November 30, 1979, as modified.

At 1136 hours on March 8, 1983, Unit 1 experienced a turbine trip and a subsequent reactor trip. The trip was apparently caused by the bumping of a Unit 1 main steam stop valve relay by a contractor employee while working on a control panel; this sent a trip signal to the turbine. This event was reported via the Emergency Notification System as required by 10 CFR 50.72. A reactor coolant sample was obtained and analyzed at 1318 hours on March 8. Specific activity was found to be 0.907  $\mu\text{Ci/g}$  dose equivalent I-131, which is less than the 1.0  $\mu\text{Ci/g}$  dose equivalent I-131 limitation set forth in paragraph IV.2 of the Confirmatory Order. It was later verified that, according to our administrative procedure for fulfilling the sampling requirements of the Confirmatory Order, the primary coolant sample must be taken between two and six hours after the trip occurred. The initial sample was taken less than two hours after the trip; therefore, another two samples were taken and analyzed at 1640 hours on March 8, meeting the time requirements of the procedure. These samples showed an average specific activity of 1.47  $\mu\text{Ci/g}$  dose equivalent I-131. Per the procedure, samples were taken and analyzed in intervals of not greater than four hours until at 2240 hours on March 8 a sample taken showed a specific activity of 0.963  $\mu\text{Ci/g}$  dose equivalent I-131. Detailed results of the specific activity analysis obtained on March 8 are as follows:

<u>Concentrations, <math>\mu\text{Ci/g}</math></u>					
<u>Isotope</u>	<u>1318</u>	<u>1640</u>	<u>1730</u>	<u>2126</u>	<u>2240</u>
I-131	0.590	1.04*	1.01	0.747	0.706
I-132	0.448	0.477*	0.410	0.221	0.222
I-133	0.874	1.27*	1.17	0.823	0.766
I-134	0.270	0.0508*	0.0566	0.206	0.276
I-135	0.730	0.866*	0.802	0.470	0.433
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TOTAL	2.91	3.70*	3.45	2.47	2.41
Dose Equivalent I-131, $\mu\text{Ci/g}$	0.907	1.47*	1.41	1.02	0.963

\*Average of two samples taken at this time.

Based on the times the first and last samples were taken, the specific activity of the primary coolant is conservatively estimated to have exceeded 1.0  $\mu\text{Ci/g}$  dose equivalent I-131 for approximately 9-1/3 hours.

On March 6, 48 hours prior to the time the first sample was taken in which the 1.0  $\mu\text{Ci/g}$  dose equivalent I-131 limit was exceeded, the reactor was operated at 1169 MW thermal power. Load was reduced to 926 MW thermal for approximately six hours on March 7 at the request of the Power Systems Supervisor. The load reduction commenced at approximately 0031 hours. At 0822 hours, the unit was back at 1169 MW thermal and remained there until the trip at 1136 hours on March 8. Reactor startup commenced later the same day at 1410 hours and at 2122 hours the reactor was back at 1169 MW thermal.

Cleanup flow 48 hours prior to finding the limit exceeded consisted of a 35 gpm flow through the lithium hydroxide mixed bed demineralizer and then through the gas stripper. Cleanup flow, including degassing, was maintained during the period of the reactor trip and subsequent return to power. Cleanup flow was doubled to 70 gpm during reactor startup from approximately 1500 hours until 1800 hours on March 8.

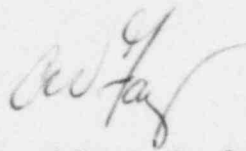
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As of March 1, the fuel burnup by core region was as follows:

<u>Region</u>	<u>Average Burnup, MWD/MTU</u>
8A	19,916
10	33,356
11	25,945
12	18,625
12A	10,053
13	11,299
13A	2,188

This occurrence is an example of iodine spiking following a power reduction or reactor trip. Similar occurrences have been observed frequently in pressurized water reactors in the past. Westinghouse Topical Report WCAP-8637 dated November 1975 has presented a discussion and analysis of this phenomenon. Subsequent to this reactor trip and iodine spike, the Point Beach Unit 1 primary coolant activity has remained below the 1.0  $\mu\text{Ci/g}$  dose equivalent I-131 limit.

Very truly yours,



Vice President-Nuclear Power

C. W. Fay

Copy to NRC Resident Inspector