WISCONSIN ELECTRIC

POWER COMPANY

POINT BEACH NUCLEAR PLANT

UNIT NOS. 1 AND 2

SEMIANNUAL

MONITORING REPORT

JANUARY, 1990 through JUNE 30, 1990

U.S. Nuclear Regulatory Commis
Docket Nos. 50-266 and 50-301
Facility Operating License Nos.
DPR-24 and DPR-27

PREFACE

This Semiannual Monitoring Report for the period of January 1, 1990, through June 30, 1990, is submitted in accordance with Point Beach Nuclear Plant Unit Nos. 1 and 2 Technical Specification 15.7.8.4 and filed under Docket Nos. 50-266 and 50-301 for Facility Operation License Nos. DPR-24 and DPR-27, respectively.

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1.0 RADIOACTIVE LIQUID RELEASES

The total radioactive liquid release excluding tritium for this reporting period was 2.68E-03 curies. This included 3.16E-04 curies in processed radioactive waste and primary coolant system letdown, 2.98E-04 curies in Unit 1 steam generator blowdown, 1.51E-03 curies in Unit 2 steam generator blowdown and 5.59E-04 curies in retention pond effluent.

The total tritium release for this reporting period was 4.14E+02 curies. This included 4.09E+02 curies in processed radioactive waste and primary coolant system letdown, 3.33E-02 curies in Unit 1 steam generator blowdown, 3.59E+00 curies in Unit 2 steam generator blowdown, and 8.22E-01 curies in retention pond effluent.

All radioactive liquid releases to Lake Michigan were made through the circulating water discharge system.

1.1 Circulating Water Radionuclide Release Summary

1.1.1 Releases During Current Reporting Period

Radioactive liquid releases via the circulating water discharge are summarized by individual source, total, and equivalent curie release on a monthly basis and presented in Table 1-1.

1.1.2 Additions to Previous Semiannual Monitoring Report

The following information was not available at the time of the previous report preparation and should be added to Table 1-1 of the Semiannual Monitoring Report for July 1, 1989 through December 31, 1989.

	NOV	DEC	6-MONTH TOTAL
Total Activity Released (Ci)			
Gross Alpha	<MDA	<MDA	6.51E-05
Strontium	4.67E-06	<MDA	1.21E-04
Average Diluted Discharge Concentration (μCi/cc)			
Gross Alpha	<MDA	<MDA	
Strontium	7.51E-14	<MDA	

TABLE 1-1

ISOTOPIC COMPOSITION OF CIRCULATING WATER DISCHARGE
JANUARY 1, 1990 THROUGH JUNE 30, 1990

	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
Total Activity Released (Ci)							
Gamma Scan	6.12E-04	2.38E-04	9.27E-04	2.39E-04	4.58E-04	2.10E-04	2.68E-03
Gross Alpha	<MDA	<MDA	<MDA	<MDA	<MDA	(1)	(1)
Tritium	2.41E+01	5.11E+01	6.67E+01	1.84E+01	6.96E+01	1.84E+02	4.14E+02
Strontium	<MDA	<MDA	<MDA	9.70E-07	<MDA	(1)	(1)
Total Volumes Released (Gal)							
Processed Waste	3.05E+04	4.80E+04	8.73E+04	1.03E+05	1.36E+05	9.06E+04	4.95E+05
(U1) Steam Generator Blowdown	2.59E+06	1.98E+06	2.76E+06	4.42E+04	2.65E+06	2.66E+06	1.27E+07
(U2) Steam Generator Blowdown	2.59E+06	1.97E+06	2.66E+06	2.57E+06	2.59E+06	2.50E+06	1.49E+07
Retention Pond	3.69E+06	3.63E+06	3.89E+06	3.85E+06	3.58E+06	2.87E+06	2.15E+07
Total	8.87E+06	7.58E+06	9.31E+06	6.46E+06	8.82E+06	8.03E+06	4.91E+07
Volume of Dilution Water (Gal)	9.82E+09	8.87E+09	1.37E+10	1.68E+10	1.74E+10	1.66E+10	8.32E+10
Average Diluted Discharge Concentration (uCi/cc)							
Gross Gamma	1.67E-11	7.20E-12	1.77E-11	4.64E-12	7.10E-12	3.33E-12	
Gross Alpha	<MDA	<MDA	<MDA	<MDA	<MDA	(1)	
Tritium	6.48E-07	1.52E-06	1.28E-06	2.89E-07	1.06E-06	2.92E-06	
Strontium	<MDA	<MDA	<MDA	1.52E-14	<MDA	(1)	
Maximum Discharge Concentration During Release Period (uCi/cc)							
Gross Gamma	5.83E-11	5.51E-11	1.07E-09	1.12E-10	8.79E-10	1.42E-11	
Tritium	1.26E-04	1.45E-04	9.07E-05	5.31E-05	8.45E-05	1.16E-04	
Total Equivalent Curies Released							
Co-60 Equivalent Curies	7.69E-04	6.90E-04	5.44E-03	1.34E-04	8.69E-04	3.17E-03	1.11E-02
% Annual RETS Limit	8.12E-04	7.29E-04	5.74E-03	1.41E-04	9.18E-04	3.35E-03	1.17E-02
I-131 Equivalent Curies	9.80E-06	2.48E-06	4.99E-05	1.38E-05	<MDA	<MDA	7.60E-05
% Annual RETS Limit	3.74E-05	9.47E-06	1.90E-04	5.27E-05	— 0 —	— 0 —	2.90E-04
Tritium Equivalent Curies	2.41E+01	5.11E+01	6.67E+01	1.84E+01	6.96E+01	1.84E+02	4.14E+02
% Annual RETS Limit	1.25E-01	2.65E-01	3.46E-01	9.53E-02	3.61E-01	9.53E-01	2.14E+00

(1) Information unavailable at time of report preparation.

Note: Dissolved noble gases detected in liquid effluents are included in airborne release totals
RETS = Radiological Effluent Technical Specifications.

1.2 Isotopic Composition of Circulating Water Discharges

1.2.1 Releases During Current Reporting Period

The isotopic composition of circulating water discharges during the current reporting period is presented in Table 1-2.

1.2.2 Additions to Previous Semiannual Monitoring Report

The following information was not available at the time of report preparation and should be added to Table 1-2 of the Semiannual Monitoring Report for July 1, 1989 through December 31, 1989.

	NOV	DEC	6-MONTH TOTAL (Ci)
Sr-89(Ci)	3.44E-06	<MDA	3.44E-06
Sr-90(Ci)	1.23E-06	<MDA	1.12E-04

1.3 Subsoil Drain System Releases of Tritium

1.3.1 Releases During Current Reporting Period

The release of tritium via the subsoil drain system during the current reporting period is presented in Table 1-3.

TABLE 1-3

SUBSOIL SYSTEM DRAINS - TRITIUM SUMMARY

January 1, 1990 through June 30, 1990

First Quarter	S-1	S-3	S-9	S-10	Totals
H-3 (µCi/cc)	<MDA	<MDA	No sample	<MDA	
Ave. Flow (gpd)	2.60E+03	1.36E+03	No flow	1.73E+04	
Second Quarter					
H-3 (µCi/cc)	<MDA	<MDA	<MDA	<MDA	
Ave. Flow (gpd)	9.28E+03	4.66E+04	1.16E+02	1.42E+04	
Semiannual Totals					
Total Released (Ci)	<MDA	<MDA	<MDA	<MDA	<MDA
Total Flow (gals)	1.08E+06	4.36E+06	1.06E+04	2.85E+06	8.30E+06

TABLE 1-2

ISOTOPIC COMPOSITION OF CIRCULATING WATER DISCHARGES
JANUARY 1, 1990 THROUGH JUNE 30, 1990

NUCLIDES RELEASED	JAN (Curies)	FEB (Curies)	MAR (Curies)	APR (Curies)	MAY (Curies)	JUN (Curies)	TOTAL (Curies)
Tritium	2.41E+01	5.11E+01	6.67E+01	1.84E+01	6.96E+01	1.84E+02	4.14E+02
I-132	<MDA	4.45E-05	<MDA	<MDA	<MDA	<MDA	4.45E-05
I-133	4.44E-05	<MDA	2.26E-04	6.22E-05	<MDA	<MDA	3.33E-04
F-18	5.09E-04	1.36E-04	1.98E-04	1.42E-04	2.99E-04	<MDA	1.28E-03
Ag-110m	<MDA	<MDA	8.73E-06	<MDA	<MDA	<MDA	8.73E-06
Co-58	<MDA	1.68E-06	1.23E-05	<MDA	<MDA	<MDA	1.40E-05
Co-60	9.36E-06	1.12E-05	1.16E-04	2.73E-05	1.07E-04	<MDA	2.71E-04
Cs-137	4.98E-05	4.48E-05	3.52E-04	6.90E-06	5.02E-05	2.10E-04	7.14E-04
Mn-54	<MDA	<MDA	9.01E-06	<MDA	<MDA	<MDA	9.01E-06
Nb-97	<MDA	<MDA	<MDA	<MDA	2.44E-06	<MDA	2.44E-06
Sr-89	<MDA	<MDA	<MDA	<MDA	<MDA	(1)	(1)
Sr-90	<MDA	<MDA	<MDA	9.70E-07	<MDA	(1)	(1)

(1) Information unavailable at time of report preparation.

Note: Dissolved noble gases detected in liquid effluents are included in airborne release totals.

1.4 Land Application of Sewage Sludge

Trace amounts of radionuclides may be land-applied with sewage sludges on various Department of Natural Resources approved Wisconsin Electric Power Company properties surrounding the Point Beach Nuclear Plant in accordance with approved methodologies pursuant to 10 CFR 20.302. The amounts discharged in the sewage during this reporting period are presented in Table 1-4.

TABLE 1-4

SEWAGE SLUDGE LAND APPLICATIONS

January 1, 1990 through June 30, 1990

Date of Application	Gallons	Site	Activity Released (Ci)
May 30, 1990	15,000	PB-01	<MDA

2.0 RADIOACTIVE AIRBORNE RELEASES

The release paths contributing to radioactive airborne release totals during this reporting period were the auxiliary building vent stack, drumming area vent stack, gas stripper building vent stack, Unit 1 containment purge stack, Unit 2 containment purge stack, combined air ejector decay duct exhaust, and turbine building ventilation exhaust.

There was one gas decay tank released during this reporting period.

2.1 Radioactive Airborne Release Summary

2.1.1 Releases During Current Reporting Period

Radioactivity released in airborne effluents for the current reporting period are summarized in Table 2-1.

2.1.2 Additions to Previous Semiannual Monitoring Report

The following information was not available at time of the last report preparation and should be added to Table 2-1 of the Semiannual Monitoring Report for July 1, 1989 through December 31, 1989.

	JUL	AUG	SEP	OCT	NOV	DEC	6-MONTH TOTAL (Ci)
Strontium (Ci)	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA

TABLE 2-1

RADIOACTIVE AIRBORNE RELEASE SUMMARY
JANUARY 1, 1990 THROUGH JUNE 30, 1990

	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
Total Noble Gases (Ci):(2)	2.16E-01	2.23E-01	3.73E-01	2.62E-01	1.46E-01	1.46E-01	1.37E+00
Total Radioiodines (Ci):	1.17E-06	4.13E-06	3.19E-05	8.64E-06	2.00E-07	<MDA	4.60E-05
Total Particulates (Ci):	3.37E-06	7.45E-05	7.87E-06	1.97E-05	9.47E-06	<MDA	1.15E-04
Alpha (Ci):	6.73E-08	7.34E-05	7.44E-11	<MDA	<MDA	<MDA	7.35E-05
Strontium (Ci):	<MDA	<MDA	<MDA	(1)	(1)	(1)	(1)
All Others (Ci):	3.30E-06	1.10E-06	7.87E-06	1.97E-05	9.47E-06	<MDA	4.14E-05
Total Tritium (Ci):	1.05E+01	8.09E+00	1.27E+01	1.42E+01	1.06E+01	9.23E+00	6.53E+01
Maximum Hourly Average Release Rate (3) (Curies/Second)	2.07E-04	2.36E-04	1.78E-04	2.72E-05	2.27E-04	3.80E-07	
Total Equivalent Curies Released							
Co-60 Equivalent Curies	7.54E-06	8.99E-06	5.23E-06	2.09E-05	7.53E-06	<MDA	5.02E-05
% Annual RETS Limit	4.38E-04	5.23E-04	3.04E-04	1.22E-03	4.38E-04	-- 0 --	2.92E-03
I-131 Equivalent Curies	1.17E-06	2.96E-06	1.34E-05	6.39E-06	1.08E-07	<MDA	2.40E-05
% Annual RETS Limit	3.32E-04	8.41E-04	3.81E-03	1.82E-03	3.07E-05	-- 0 --	6.83E-03
Xe-133 Equivalent Curies (2)	2.86E+00	3.78E+00	3.53E+00	1.55E+00	2.27E+00	2.23E+00	1.62E+01
% Annual RETS Limit	2.75E-04	3.63E-04	3.39E-04	1.49E-04	2.18E-04	2.14E-04	1.56E-03
Tritium Equivalent Curies	1.05E+01	8.09E+00	1.27E+01	1.42E+01	1.06E+01	9.23E+00	6.53E+01
% Annual RETS Limit	3.62E-02	2.79E-02	4.38E-02	4.90E-02	3.66E-02	3.18E-02	2.25E-01

(1) Information unavailable at time of report preparation but values typically do not alter monthly totals.
(2) Includes noble gas contribution from liquid releases.
(3) Expressed as Xe-133 equivalents.

2.2 Isotopic Airborne Releases

2.2.1 Releases During Current Reporting Period

The monthly isotopic airborne releases for the current reporting period are presented in Table 2-2.

2.2.2 Additions to Previous Semiannual Monitoring Report

The following information was not available at the time of previous report preparation and should be added to Table 2-2 of the Semiannual Monitoring Report covering the period July 1, 1989 through December 31, 1989.

	JUL	AUG	SEP	OCT	NOV	DEC	6-MONTH TOTAL (Ci)
Sr-89(Ci)	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Sr-90(Ci)	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA

3.0 RADIOACTIVE SOLID WASTE SHIPMENTS

Solid wastes shipped for burial during this reporting period were as follows:

DATE OF SHIPMENT TO BURIAL	VOLUME (CUBIC FEET)	TOTAL ACTIVITY (CURIES)	BURIAL SITE
02/09/90	180.1 (1)	6.92E-02	Barnwell, S.C.
02/21/90	180.1 (2)	1.40E+00	Barnwell, S.C.
02/21/90	180.1 (2)	1.68E+00	Barnwell, S.C.
02/27/90	180.1 (2)	2.43E+00	Barnwell, S.C.
06/25/90	92.5 (1)	6.98E-02	Hanford, WA
06/25/90	96.0 (1)	6.66E-01	Hanford, WA
TOTAL	908.9	6.32E+00	

(1) Dry Active Waste
(2) Evaporator Concentrates

4.0 NEW & SPENT FUEL SHIPMENTS AND RECEIPTS

During this reporting period, a total of 29 new fuel assemblies were received from Westinghouse Electric Corporation for Unit 1. The new fuel assemblies received for Unit 1 were used for the spring 1990 refueling.

There were no spent fuel shipments made from Point Beach Nuclear Plant during this reporting period.

TABLE 2-2

RADIOACTIVE AIRBORNE RELEASE SUMMARY
JANUARY 1, 1990 THROUGH JUNE 30, 1990

NUCLIDES RELEASED	JAN (Curies)	FEB (Curies)	MAR (Curies)	APR (Curies)	MAY (Curies)	JUN (Curies)	TOTAL (Curies)
Tritium	1.05E+01	8.09E+00	1.27E+01	1.42E+01	1.06E+01	9.23E+00	6.53E+01
Xe-133	8.06E-02	7.22E-02	2.37E-01	1.36E-01	5.62E-02	6.06E-02	6.43E-01
Kr-85m	1.47E-03	3.39E-03	2.71E-03	1.12E-03	1.89E-03	1.14E-03	1.17E-02
Kr-88	4.34E-03	7.93E-03	4.71E-03	1.72E-03	5.84E-03	2.88E-03	2.74E-02
Xe-133m	3.80E-05	1.51E-03	2.58E-03	2.91E-03	6.71E-05	4.41E-04	7.55E-03
Xe-135	1.68E-02	2.37E-02	2.42E-02	1.27E-02	1.54E-02	1.34E-02	1.06E-01
Xe-138	1.67E-02	3.84E-02	2.14E-02	7.43E-03	2.15E-02	1.21E-02	1.18E-01
Kr-87	3.41E-03	7.32E-03	4.18E-03	1.51E-03	4.39E-03	2.63E-03	2.34E-02
Xe-135m	5.39E-03	1.12E-02	6.42E-03	2.35E-03	6.62E-03	3.81E-03	3.58E-02
Ar-41	6.06E-02	5.76E-02	7.00E-02	3.17E-02	3.37E-02	4.92E-02	3.03E-01
Kr-85	2.71E-02	<MDA	<MDA	6.44E-02	<MDA	<MDA	9.15E-02
I-131	1.17E-06	2.60E-06	7.68E-06	5.68E-06	7.90E-08	<MDA	1.72E-05
I-133	<MDA	1.53E-06	2.42E-05	2.96E-06	1.21E-07	<MDA	2.88E-05
F-18	2.33E-06	<MDA	6.33E-06	<MDA	1.51E-06	<MDA	1.02E-05
Cs-137	6.45E-07	7.87E-07	3.58E-07	1.26E-06	4.21E-07	<MDA	3.47E-06
Co-58	3.26E-07	2.12E-07	7.88E-07	1.83E-05	7.53E-06	<MDA	2.72E-05
Co-60	5.18E-10	1.08E-07	4.00E-07	2.18E-07	<MDA	<MDA	7.27E-07
Sr-89	<MDA	<MDA	<MDA	(1)	(1)	(1)	(1)
Sr-90	<MDA	<MDA	<MDA	(1)	(1)	(1)	(1)
Alpha	6.73E-08	7.34E-05	7.44E-11	<MDA	<MDA	<MDA	7.35E-05

(1) Information unavailable at time of report preparation but values typically do not alter monthly totals reported in Table 2-1.

5.0 RADIOLOGICAL ENVIRONMENTAL MONITORING

Radiological environmental monitoring conducted at Point Beach Nuclear Plant from January 1, 1990 through June 30, 1990 consisted of air filters, milk, lake water, well water, soil, fish, shoreline sediments, algae, vegetation, and TLDs.

No siginficant deviations from normal results, attributable to the operation of the Point Beach Nuclear Plant, were identified during this six month reporting period. Low levels of Sr-90 and Cs-137, resulting from Chernobyl and atmospheric weapons tests, still persist in milk (Sr-90) as well as in fish and soil (Cs-137) samples. The first quarter elevated H-3 concentrations in lake water from two sites north of PBNP were not the result of PBNP operations because 1) the predominant current direction in this area of the lake is from north to south, 2) the concentrations increased with distance northward away from PBNP, 3) the elevated concentrations first appeared at the sampling site furthest north, and 4) no H-3 concentrations above the LLD were found in the discharge flume samples (collected weekly) and at sampling sites south of PBNP.

No.	Sample Type	Low	Average	High	Units
	TLDs				
44	Environmental Radiation	0.58	1.05 ± 0.17	1.42	mR/7 days
	Air				
156	Gross beta	0.01	0.02 ± 0.01	0.05	pCi/m^3
156	Radioiodine		all <0.03		pCi/m^3
12	Cs-137		all <0.01		pCi/m^3
12	Cs-134		all <0.01		pCi/m^3
12	Other Gamma Emitters		all <0.01		pCi/m^3
	Milk				
18	Radioiodine		all <0.5		pCi/l
18	Sr-89		all <5		pCi/l
18	Sr-90	0.8	1.4 ± 0.4	2.3	pCi/l
18	Cs-134		all <5		pCi/l
18	Cs-137		all <5		pCi/l
18	Ba-La-140		all <5		pCi/l
18	Other Gamma Emitters		all <5		pCi/l
	Lake Water				
30	Gross Beta	1.7	2.6 ± 0.8	6.1	pCi/l
10	Tritium	<500	$<677 \pm 434$	1856	pCi/l
10	Sr-89		all <5		pCi/l
10	Sr-90		all <1		pCi/l
30	Radioiodine		all <0.5		pCi/l
30	Mn-54		all <10		pCi/l
30	Fe-59		all <30		pCi/l
30	Co-58		all <10		pCi/l
30	Co-60		all <10		pCi/l
30	Zn-65		all <30		pCi/l
30	Zr-Nb-95		all <15		pCi/l
30	Cs-134		all <10		pCi/l
30	Cs-137		all <10		pCi/l
30	Ba-La-140		all <15		pCi/l
30	Other Gamma Emitters		all <30		pCi/l

No.	Sample Type	Low	Average	High	Units
	Well Water				
2	Gross Beta	<3.5	<4.1±0.8	4.6	pCi/l
2	H-3		all <500		pCi/l
2	Sr-89		all <5		pCi/l
2	Sr-90		all <1		pCi/l
2	I-131		all <0.5		pCi/l
2	Mn-54		all <10		pCi/l
2	Fe-59		all <30		pCi/l
2	Co-58		all <10		pCi/l
2	Co-60		all <10		pCi/l
2	Zn-65		all <30		pCi/l
2	Zr-Nb-95		all <15		pCi/l
2	Cs-134		all <10		pCi/l
2	Cs-137		all <10		pCi/l
2	Ba-La-140		all <15		pCi/l
2	Other Gamma Emitters		all <30		pCi/l
	Fish				
3	Gross Beta	2.1	2.9±0.8	3.7	pCi/g wet
3	Mn-54		all <0.13		pCi/g wet
3	Fe-59		all <0.26		pCi/g wet
3	Co-58		all <0.13		pCi/g wet
3	Co-60		all <0.13		pCi/g wet
3	Zn-65		all <0.26		pCi/g wet
3	Cs-134		all <0.13		pCi/g wet
3	Cs-137	<0.15	<0.17±0.04	0.22	pCi/g wet
3	Other Gamma Emitters		all <0.5		pCi/g wet
	Soil				
8	Gross Beta	17.3	24.5±5.4	35.0	pCi/g dry
8	Cs-137	0.17	0.36±0.19	0.41	pCi/g dry
8	Other Gamma Emitters		all <0.15		pCi/g dry
	Shoreline Sediment				
5	Gross Beta	6.4	7.6±0.9	8.8	pCi/g dry
5	Cs-137		all <0.15		pCi/g dry
5	Other Gamma Emitters		all <0.15		pCi/g dry
	Vegetation				
8	Gross Beta	5.0	6.2±0.9	7.5	pCi/g wet
8	Cs-137		all <0.08		pCi/g wet
8	Cs-134		all <0.06		pCi/g wet
8	I-131		all <0.06		pCi/g wet
8	Other Gamma Emitters		all <0.25		pCi/g wet

No.	Sample Type	Low	Average	High	Units
	Algae				
2	Gross Beta	4.7	4.9±0.2	5.0	pCi/g wet
2	Co-58		all <0.25		pCi/g wet
2	Co-60		all <0.25		pCi/g wet
2	Cs-134		all <0.25		pCi/g wet
2	Cs-137		all <0.25		pCi/g wet
2	Other Gamma Emitters		all <0.25		pCi/g wet

6.0 NONRADIOACTIVE CHEMICAL RELEASES

6.1 Scheduled Chemical Waste Releases

Scheduled chemical waste releases to the circulating water system from January 1, 1990 to June 30, 1990 included 5.03E+06 gallons of neutralized wastewater. The wastewater contained 3.24E+02 pounds of suspended solids and 4.20E+05 pounds of dissolved solids.

*Scheduled chemical waste releases are based on the average analytical results obtained from sampling a representative number of neutralizing tanks.

6.2 Miscellaneous Chemical Waste Releases

Miscellaneous chemical waste releases from the retention pond (based on effluent analyses) to the circulating water for January 1, 1990 to June 30, 1990 included 2.15E+07 gallons of clear wastewater. The wastewater contained 1.83E+03 pounds of suspended solids.

*Miscellaneous chemical waste released directly to the circulating water, based on amount of chemicals used for January 1, 1990 to June 30, 1990 included 1.15E+04 pounds of sodium bisulfite and 5.92E+03 pounds of sodium hypochlorite.

7.0 CIRCULATING WATER SYSTEM OPERATION

The circulating water system operation during this reporting period for periods of plant operation is described in Table 7-1.

8.0 LEAK TESTING OF RADIOACTIVE SOURCES

During this reporting period all applicable sealed radioactive sources were leak tested in accordance with Technical Specification 15.4.12. Leak test results were all <0.005 μCi.

TABLE 7-1

CIRCULATING WATER SYSTEM OPERATION

January 1, 1990 to June 30, 1990

		JAN	FEB	MAR*	APR*	MAY*	JUN
Average Volume Cooling Water Discharge (Million gal/day)	U1	316.8	316.8	436.4	313.9	504.3	554.4
	U2	316.8	316.8	449.0	561.8	561.9	554.4
Average Cooling Water Intake Temperature (Degrees F)	U1	36.1	35.8	38.5	39.9	48.7	48.9
	U2	36.1	35.8	38.5	41.9	47.4	48.8
Average Cooling Water Discharge Temperature (Degrees F)	U1	67.6	67.2	58.7	42.5	63.2	67.5
	U2	67.9	68.2	59.8	59.1	64.9	68.9
Average Ambient Lake Temperature (Degrees F)		35.0	34.5	37.2	41.5	46.6	47.0

(* = Unit 1 refueling shutdown from March, 31, 1990 to May 13, 1990)

9.0 MISCELLANEOUS REPORTING REQUIREMENTS

9.1 Revisions to the PBNP Offsite Dose Calculation Manual (ODCM) and Process Control Program (PCP)

Revisions were made to the ODCM, Environmental Manual and PCP during this reporting period. Complete copies are being sent to the NRC. The changes are summarized below.

Two improvements were made to the PCP to address the following:

1. revised Wisconsin Electric Quality Procedures for vendor approval,

2. concerns regarding waste solidification as expressed by the NRC at its solidification workshop.

Changes and improvements made to the Environmental Manual consist of the following:

1. new identification numbers of forms used for sample collection and scheduling based upon the new PBNP form numbering system,

2. wording added to clarify instructions for sample collection and handling,

3. change in the radioanalytical vendor's telephone number to reflect new Chicago suburb area code.

The two revisions to the ODCM consist of the following:

1. Rev. 4, March 1990 (Appendix A-2) reflects the new Point Beach Nuclear Plant's Wisconsin Pollutant Discharge Elimination System permit which allows the characterization of non-radiological chemical and physical properties of sewage sludge for land application to be made on an annual basis as compared to the previous per application basis,

2. Rev. 5, June 1990 (pages 3-2 through 3-5) reflects changes to the liquid release alarm setpoint methodology. Our analysis of the previous setpoint methodology based on the Co-60 MPC revealed the potential for a non-conservative result for certain radionuclides. This potential is corrected in the methodology in which the liquid release alarm setpoints are based on the PBNP historical (1985-1989) 5 year weighted average circulating water radionuclide concentration scaled to equal a weighted average MPC in the circ water system under maximum flow.

The changes to the ODCM and PCP increase the overall effectiveness of these programs.

9.2 Interlaboratory Comparison Program

The analytical laboratory contracted to perform the radioanalyses of the PBNP environmental samples participated in the EPA Interlaboratory Comparison Program during this reporting period.

9.3 Deviations from Specified Environmental Sample Types, Locations, and Frequencies

Sample types, sampling locations, and collection frequencies complied with Technical Specification 15.7.7.A during this reporting period.

9.4 Summary of Unachievable Specified Environmental LLDs

All LLDs listed in Table 15.7.7-2 of the PBNP Technical Specifications were during this sampling period.

9.5 Special Circumstances

No special circumstances report regarding operation of the explosive gas monitor for the waste gas holdup system was needed during this reporting period.