

WISCONSIN ELECTRIC

POWER COMPANY

POINT BEACH NUCLEAR PLANT

UNIT NOS. 1 AND 2

Semiannual

Monitoring Report

July 1, 1982 through December 31, 1982

8303040538 830225  
PDR ADOCK 05000266  
R PDR

U.S. Nuclear Regulatory Commission  
Docket Nos. 50-266 and 50-301  
Facility Operating License Nos.  
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## 1.0 RADIOACTIVE LIQUID RELEASES

Radioactive liquid releases via the circulating water discharge are summarized for total release and by individual source on a monthly basis in Table 1-1. An isotopic breakdown of the total radioactive liquid release is presented in Table 1-2.

The total radioactive liquid release excluding tritium for this reporting period was 0.456 Curies which included 0.044 Curies of processed radioactive waste and primary coolant system letdown, 0.198 Curies of Unit 1 steam generator blowdown, and 0.214 Curies of Unit 2 steam generator blowdown. There was no detectable activity in retention pond effluent (other than tritium). The total tritium release for this reporting period was 297.7 Curies, which included 292.25 Curies of processed radioactive waste and primary coolant system letdown, 1.96 Curies of Unit 1 steam generator blowdown, 2.63 Curies of Unit 2 steam generator blowdown, and 0.862 Curies of retention pond effluent. All radioactive liquid releases to Lake Michigan were made through the circulating water discharge.

TABLE 1-1

RADIOACTIVE LIQUID CIRCULATING WATER RELEASE SUMMARY  
PERIOD OF JULY 1, 1982 TO DECEMBER 31, 1982

	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Total</u>
<u>Total Activity Released, (Ci)</u>							
Gamma Scan	4.23E-02	6.25E-02	1.60E-01	7.82E-02	8.70E-03	1.04E-01	4.56E-01
Gross Alpha	2.86E-05	3.53E-05	<MDA	<MDA	1.09E-04	<MDA	1.73E-04
Tritium	3.49E+01	2.03E+01	9.69E+01	3.18E+01	5.47E+01	5.87E+01	2.97E+02
<u>Total Volumes Released (Gal)</u>							
Processed Waste	5.34E+04	3.97E+04	1.30E+05	1.26E+05	1.44E+05	2.24E+05	7.17E+05
Steam Generator Blowdown, Unit 1	2.68E+06	2.65E+06	2.59E+06	1.87E+06	Shutdown	2.14E+06	1.19E+07
Steam Generator Blowdown, Unit 2	2.64E+06	2.57E+06	2.16E+06	2.65E+06	2.46E+06	2.66E+06	1.51E+07
Retention Pond	2.35E+06	4.88E+06	2.04E+06	1.97E+06	1.68E+06	1.50E+06	1.44E+07
Total	7.72E+06	1.01E+07	6.92E+06	6.62E+06	4.29E+06	6.52E+06	4.22E+07
<u>Volume of Dilution Water, (cc)</u>	6.15E+13	6.15E+13	1.19E+14	6.69E+13	5.73E+13	3.62E+13	4.03E+14
<u>Average Diluted Discharge Concentration (μCi/cc)</u>							
Gross Gamma	6.88E-10	1.01E-09	1.35E-09	1.17E-09	1.52E-10	2.87E-09	
% MPC	9.22E-02	1.15E-01	1.73E-01	1.50E-01	1.67E-02	3.68E-01	
Gross Alpha	4.65E-13	5.74E-13	<MDA	<MDA	1.90E-12	<MDA	
% MPC	1.55E-03	1.91E-03	--	--	6.33E-05	--	
Tritium	5.67E-07	3.30E-07	8.14E-07	4.75E-07	9.54E-07	1.62E-06	
% MPC	1.89E-02	1.10E-02	2.71E-02	1.58E-02	3.18E-02	5.41E-02	
<u>Maximum Discharge Concentration During Release Period, (μCi/cc)</u>							
Gross Gamma	7.22E-09	3.40E-09	4.44E-08	2.88E-08	2.68E-09	9.83E-08	
Tritium	5.18E-05	6.76E-05	9.07E-05	8.61E-05	1.01E-04	1.55E-04	

TABLE 1-2

ISOTOPIC COMPOSITION OF CIRCULATING WATER DISCHARGES  
PERIOD OF JULY 1, 1982 TO DECEMBER 31, 1982

<u>Nuclides Released</u>	<u>July (Curies)</u>	<u>August (Curies)</u>	<u>September (Curies)</u>	<u>October (Curies)</u>	<u>November (Curies)</u>	<u>December (Curies)</u>	<u>Total (Curies)</u>
Tritium	3.49E+01	2.03E+01	9.69E+01	3.18E+01	5.47E+01	5.87E+01	2.97E+02
I-131	1.17E-02	1.39E-02	4.31E-02	1.98E-02	2.26E-03	2.26E-03	9.30E-02
I-132	2.70E-03	3.27E-03	3.69E-02	3.56E-03	1.10E-04	6.16E-04	4.72E-02
I-133	1.51E-02	1.80E-02	7.79E-03	1.23E-02	1.14E-03	3.57E-03	5.79E-02
I-134	<MDA	1.30E-03	1.96E-03	6.80E-04	<MDA	2.86E-04	4.23E-03
I-135	3.97E-03	1.23E-02	1.22E-02	8.43E-03	4.40E-04	1.69E-03	3.90E-02
Xe-133	2.26E-03	7.39E-04	5.68E-03	3.37E-03	1.87E-03	1.98E-02	3.37E-02
Kr-85M	<MDA	<MDA	5.17E-05	1.05E-04	<MDA		1.57E-04
Kr-88	<MDA	<MDA	<MDA	<MDA	<MDA		
Xe-133M	<MDA	<MDA	<MDA	<MDA	<MDA	2.76E-04	2.76E-04
Xe-135	3.07E-04	7.83E-04	6.59E-04	1.67E-03	1.09E-04	2.71E-03	6.24E-03
Xe-138	<MDA	4.34E-03	<MDA	<MDA	<MDA	<MDA	4.34E-03
Co-57	<MDA	<MDA	<MDA	1.63E-05	<MDA		1.63E-05
Ce-144	<MDA	<MDA	<MDA	<MDA	<MDA		
Ce-141	<MDA	2.03E-04	<MDA	<MDA	<MDA	<MDA	2.03E-04
Te-132	<MDA	<MDA	<MDA	<MDA	<MDA		
Cr-51	<MDA	<MDA	<MDA	<MDA	<MDA	1.28E-03	1.28E-03
Sb-125	7.88E-06	<MDA	<MDA	<MDA	<MDA	<MDA	7.88E-06
F-18	1.64E-03	2.16E-03	1.49E-03	1.20E-03	4.58E-04	1.96E-04	7.14E-03
Ru-103	<MDA	<MDA	<MDA	<MDA	<MDA	1.91E-05	1.91E-05
Cs-134	1.83E-03	1.74E-03	2.02E-02	9.45E-03	4.70E-04	1.67E-02	5.05E-02
Ru-106	<MDA	<MDA	<MDA	<MDA	<MDA	2.17E-05	2.17E-05
Ag-110M	<MDA	<MDA	<MDA	<MDA	<MDA	1.63E-05	1.63E-05
Cs-137	2.67E-03	2.76E-03	2.30E-02	1.65E-02	1.72E-03	1.73E-02	6.40E-02
Nb-95	<MDA	<MDA	<MDA	<MDA	3.71E-06		
Co-58	6.60E-06	<MDA	2.42E-05	6.33E-06	3.32E-05	3.25E-06	7.36E-05
Cs-136	<MDA	<MDA	4.97E-04	3.46E-04	<MDA	<MDA	8.43E-04
Mn-54	<MDA	<MDA	4.46E-05	<MDA	<MDA		4.46E-05
Co-60	1.15E-05	2.28E-05	1.34E-04	1.41E-04	8.59E-05	6.65E-04	1.06E-03
Na-24	<MDA	2.92E-04	6.82E-05	<MDA	<MDA		3.60E-04
Cs-138	<MDA	5.69E-04	1.57E-03	<MDA	<MDA	2.63E-04	2.40E-03
Rb-88	<MDA	<MDA	2.91E-03	<MDA	<MDA	3.57E-02	3.86E-02
Sr-89	<MDA	<MDA	1.85E-03	1.37E-04	<MDA	3.08E-04	2.30E-03
Sr-90	6.46E-05	5.81E-05	1.05E-04	1.85E-04	<MDA	1.66E-04	5.79E-04
TOTAL	4.23E-02	6.25E-02	1.60E-01	7.82E-02	8.70E-03	1.04E-01	4.56E-01

Note: Total does not include alpha

TABLE 1-3  
SUBSOIL SYSTEM DRAINS  
TRITIUM SUMMARY

JULY THROUGH DECEMBER 1982

	<u>LOCATION</u>				
	<u>S-1</u>	<u>S-3</u>	<u>S-9</u>	<u>S-10</u>	<u>TOTALS</u>
<u>Third Quarter</u>					
H <sup>3</sup> (μCi/cc)	1.08E-06	9.77E-07	No sample	5.79E-07	--
Aver. flow, gpd	4100	1140	No flow	16,750	--
<u>Fourth Quarter</u>					
H <sup>3</sup> (μCi/cc)	1.30E-06	2.13E-06	No sample	1.71E-06	--
Aver. flow, gpd	7440	1280	No flow	5,800	--
<u>Semiannual Totals</u>					
Total released, Ci	4.91E-03	1.34E-03	0.0	6.83E-03	1.31E-02
Total flow, gal	1.06E+06	2.23E+05	0.0	2.08E+06	3.36E+06

## 2.0 RADIOACTIVE AIRBORNE RELEASES

Radioactive airborne releases during normal plant operation are reported by total release in Table 2-1, and summarized by isotope in Table 2-2. The release paths contributing to radioactive airborne releases during this reporting period were the auxiliary building vent stack, Unit 1 containment purge stack, Unit 2 containment purge stack, drumming area vent stack, gas stripper building ventilation exhaust, combined air ejector decay exhaust and turbine building ventilation exhaust.

There were five gas decay tank releases during this report period.

TABLE 2-1

RADIOACTIVE AIRBORNE RELEASE SUMMARY  
PERIOD OF JULY, 1982 TO DECEMBER, 1982

	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Total</u>
Total Curies Released (Excluding Tritium)	4.51E+01	4.25E+01	2.04E+02	7.41E+01	4.25E+01	6.76E+01	4.76E+02
Total Xe-133 Equivalent Curies Released (1)	6.76E+02	1.61E+03	2.91E+03	3.84E+03	7.31E+02	5.64E+02	1.03E+04
Average Release Rate (Curies/Second) (2)	2.52E-04	5.99E-04	1.12E-03	1.43E-03	2.82E-04	2.10E-04	
Percent of Annual Technical Specification Limits (3)	1.30E-01	3.00E-01	5.61E-01	7.16E-01	1.41E-01	1.05E-01	
Maximum Hourly Average Release Rate (Curies/Second) (4)	3.49E-03	1.69E-03	5.83E-03	1.27E-02	1.48E-03	1.20E-02	
Monthly Average Site Boundary Concentration ( $\mu$ Ci/cc) (2)	3.78E-10	8.99E-10	1.68E-09	2.15E-09	4.23E-10	3.16E-10	

- (1) All gaseous particulate releases are converted to Xe-133 equivalent for calculational purposes using the ratio MPC(Xe-133)/MPC. MPC's for isotopes of iodine and particulate with half-lives longer than eight days are reduced by a factor of 700.
- (2) Averaged over one month and based on Xe-133 equivalent.
- (3) Annual average Technical Specification limits are 0.2 Ci/sec Xe-133 based on X/Q:1.5E-06 sec/m<sup>3</sup> maximum Technical Specification limits are 2.0 Ci/sec Xe-133 based on X/Q:1.5E-06 sec/m<sup>3</sup>.
- (4) Expressed as Xe-133 equivalent.



TABLE 2-2  
RADIOACTIVE AIRBORNE RELEASE SUMMARY  
PERIOD OF JULY 1, 1982 TO DECEMBER 31, 1982

Nuclides Released	July (Curies)	August (Curies)	September (Curies)	October (Curies)	November (Curies)	December (Curies)	Total (Curies)
Tritium	1.24E+01	7.31E+00	7.31E+01	2.35E+01	3.92E+01	2.14E+02	3.69E+02
Alpha	8.08E-12	6.17E-06	3.66E-06	1.38E-06	<MDA	<MDA	1.12E-05
Xe-133	1.60E+01	1.52E+01	1.74E+02	3.81E+01	1.62E+01	1.70E+01	2.77E+02
Kr-85M	2.29E+00	2.19E+00	2.21E+00	2.81E+00	4.31E+00	4.00E+00	1.78E+01
Kr-88	4.45E+00	4.22E+00	4.25E+00	5.46E+00	3.91E+00	7.40E+00	2.97E+01
Xe-133M	5.57E-01	3.49E-01	2.45E+00	3.92E-01	3.10E-01	4.82E-01	4.54E+00
Xe-135	1.10E+01	9.37E+00	9.30E+00	1.12E+01	8.32E+00	1.64E+01	6.56E+01
Xe-138	3.51E+00	3.22E+00	3.20E+00	4.50E+00	2.28E+00	6.03E+00	2.27E+01
Kr-87	2.23E+00	2.08E+00	2.03E+00	2.72E+00	1.95E+00	3.78E+00	1.48E+01
Xe-135M	1.43E+00	1.65E+00	1.52E+00	1.66E+00	9.69E-01	2.19E+00	9.43E+00
Ar-41	3.21E-01	5.51E-01	2.89E-01	3.53E-01	1.82E-01	5.59E-01	2.25E+00
Kr-85	3.26E+00	3.67E+00	4.00E+00	6.84E+00	3.90E+00	9.68E+00	3.14E+01
Xe-131M	<MDA	<MDA	<MDA	<MDA	1.87E-01	1.27E-01	3.14E-01

Particulates with Half-Lives Less than Eight Days

Te-132	<MDA	<MDA	3.58E-09	<MDA	<MDA	<MDA	3.58E-09
F-18	<MDA	1.03E-07	1.01E-09	1.17E-09	1.76E-11	<MDA	1.05E-07
Mo-99	<MDA	<MDA	8.27E-08	<MDA	<MDA	<MDA	8.27E-08
Cs-136	<MDA	<MDA	1.95E-06	4.55E-08	<MDA	<MDA	2.00E-06
Cs-138	1.74E-05	2.25E-04	1.13E-02	8.53E-03	<MDA	1.19E-02	3.20E-02
Rb-88	6.34E-03	3.79E-03	3.09E-03	1.16E-01	1.73E-04	4.26E-02	1.72E-01

Particulates with Half-Lives Greater than Eight Days and Iodines

I-131	2.06E-04	5.98E-04	1.11E-03	1.62E-03	2.34E-04	8.12E-05	3.85E-03
I-132	5.39E-06	<MDA	1.75E-08	9.73E-04	1.54E-04	<MDA	1.13E-03
I-133	5.66E-05	9.33E-05	2.94E-04	1.04E-04	5.79E-05	4.99E-05	6.56E-04
I-134	<MDA	3.53E-08	2.97E-06	1.20E-05	<MDA	<MDA	1.50E-05
I-135	<MDA	1.46E-07	4.49E-08	6.53E-05	<MDA	<MDA	6.55E-05
Sr-89	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA	<MDA
Sr-90	2.21E-12	3.77E-12	1.44E-12	<MDA	<MDA	<MDA	7.42E-12
Cd-109	<MDA	<MDA	<MDA	1.45E-09	<MDA	<MDA	1.45E-09
Hg-203	<MDA	<MDA	<MDA	7.27E-11	<MDA	<MDA	7.27E-11
Cs-134	1.29E-06	3.62E-06	1.51E-06	7.15E-07	3.17E-08	1.50E-06	8.67E-06
Cs-137	1.76E-06	7.27E-06	3.52E-06	2.85E-06	7.63E-07	3.48E-06	1.96E-05
Nb-95	<MDA	<MDA	<MDA	3.37E-08	3.49E-07	<MDA	3.83E-07
Co-58	<MDA	3.04E-07	<MDA	2.51E-08	2.32E-07	1.92E-07	7.53E-07
Mn-54	<MDA	<MDA	2.07E-11	<MDA	<MDA	<MDA	2.07E-11
Co-60	1.32E-07	1.02E-06	7.92E-08	1.51E-06	2.44E-05	3.11E-05	5.82E-05

### 3.0 RADIOACTIVE SOLID WASTE SHIPMENTS

Shipments offsite of solid waste for burial during this reporting period were as follows.

<u>Date</u>	<u>Volume (Ft<sup>3</sup>)</u>	<u>Total Activity (Ci)</u>
07-06-82	61.8	2.860
07-12-82	121.0	717.000 (1)
07-13-82	227.3	0.919
07-14-82	61.8	2.880
07-20-82	738.1	0.300
07-21-82	540.0	0.663
07-29-82	383.0	2.220
08-17-82	330.0	0.312
08-19-82	540.0	0.376
08-26-82	480.0	0.112
09-02-82	61.8	0.507
09-14-82	105.0	1.240
09-16-82	61.8	0.330
09-28-82	62.0	0.683
10-12-82	226.9	0.046
11-01-82	121.0	191.400 (1)
11-10-82	225.0	0.135
11-16-82	463.3	0.816
12-15-82	62.0	1.116
12-07-82	62.0	0.635
12-09-82	565.0	0.572
12-14-82	142.8	1.308
TOTALS	5641.6 (Ft <sup>3</sup> )	926.43 (Ci)

(1) Involved spent resin.

### 4.0 NEW & SPENT FUEL SHIPMENTS AND RECEIPTS

During this reporting period, a total of 20 new fuel assemblies were received from Westinghouse Electric Corporation for Unit 1. The new fuel assemblies received for Unit 1 were used for the October, 1982 refueling.

No spent fuel shipments were made.

## 5.0 RADIOLOGICAL ENVIRONMENTAL MONITORING

Radiological environmental monitoring conducted by Point Beach Nuclear Plant from July 1, 1982, through December 31, 1982, consisted of air filters, gamma dose, vegetation, lake water, well water, milk, shoreline silt, soil, algae, and fish samples collected and analyzed in accordance with Technical Specification 15.4.10.

All measurements obtained during this period are within normal ranges, and no unusual results or significant departures from normal were noted.

<u>No.</u>	<u>Sample Type</u>	<u>Low</u>	<u>Average*</u>	<u>High</u>	<u>Units</u>
<u>TLDs</u>					
43	Quarterly	0.67	$1.09 \pm 0.32$	1.42	mR/wk
<u>Air Filters</u>					
161	Gross Beta	0.00	$0.020 \pm 0.017$	0.04	pCi/m <sup>3</sup>
161	Radioiodine	--	all <0.03	--	pCi/m <sup>3</sup>
12	Gamma Scan	--	all <0.01	--	pCi/m <sup>3</sup>
<u>Milk</u>					
18	Radioiodine	--	all <0.5	--	pCi/l
18	Sr-89	--	all <5	--	pCi/l
18	Sr-90	1.2	$1.8 \pm 0.82$	2.8	pCi/l
18	Gamma Scan	--	all <5	--	pCi/l
<u>Lake Water</u>					
30	Gross Beta	1.6	$3.3 \pm 2.3$	5.8	pCi/l
30	Gamma Scan	--	all <10	--	pCi/l
10	Tritium	--	all <0.5	--	pCi/ml
10	Sr-89	--	all <5	--	pCi/l
10	Sr-90	<1	$<1.0 \pm 0.1$	1.1	pCi/l
<u>Well Water</u>					
2	Gross Beta	2.3	2.8	3.3	pCi/l
2	Gamma Scan	--	both <10	--	pCi/l
2	Tritium	--	both <0.5	--	pCi/ml
2	Sr-89	--	both <5	--	pCi/l
2	Sr-90	--	both <1	--	pCi/l
<u>Vegetation</u>					
16	Gross Beta	4.9	$13.1 \pm 9.4$	20.3	pCi/g (dry)
16	Gamma Scan	--	all <1	--	pCi/g (dry)

<u>No.</u>	<u>Sample Type</u>	<u>Low</u>	<u>Average*</u>	<u>High</u>	<u>Units</u>
<u>Soil</u>					
8	Gross Beta	14.1	19.9 $\pm$ 7.7	23.6	pCi/g (dry)
8	Gamma Scane	--	all <1	--	pCi/g (dry)
<u>Algae</u>					
6	Gross Beta	7.1	24.2 $\pm$ 35.3	41.9	pCi/g (dry)
6	Gamma Scane	--	all <5	--	pCi/g (dry)
<u>Fish</u>					
6	Gross Beta	12.4	13.6 $\pm$ 2.2	14.9	pCi/g (dry)
6	Gamma Scane	--	all <1	--	pCi/g (dry)
<u>Shoreline Silt</u>					
8	Gross Beta	14.1	19.9 $\pm$ 7.7	23.6	pCi/g (dry)
8	Gamma Scan	--	all <1	--	pCi/g (dry)

\* 95% confidence interval given when applicable. Whenever samples below the detection limit are included in the computation of the average, the average is shown as a "less than" value.

#### 6.0 NON-RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

In accordance with Amendment Nos. 29 and 33 to Facility Operating Licenses DIPR-24 and DPR-27, respectively, dated November 4, 1977, the Environmental Technical Specifications for the Point Beach Nuclear Plant, Units 1 and 2, were modified to allow temporary suspension of the non-radiological environmental monitoring program pending NRC review of the summary report of the five years of monitoring. As a result, the semiannual report specified by Item 16.6.2.a of the Technical Specification is not applicable.

## 7.0 NON-RADIOACTIVE CHEMICAL RELEASES

### 7.1 Scheduled Chemical Waste Releases

Scheduled chemical waste releases to the circulating water system for the period of July 1, 1982, to December 31, 1982, included 4,041,458 gallons of neutralized clear water waste. The waste water contained 456 pounds of suspended solids and 241,185 pounds of dissolved solids.\* When averaged over the reporting period, these discharges represented 41.24% of the Technical Specification limit for dissolved solids and 0.18% of the Technical Specification limit for suspended solids.\*\*

The concentration increases of chemical waste in the circulating water system during the period of chemical releases ranged from 0.386 to 9.301 ppm dissolved solids and from 0.000 to 0.062 ppm suspended solids.\*\*

Plant chemical records indicated that the following amounts of chemicals were released in the form of neutralized waste:

Sodium	72,310 pounds
Sulfate	155,656 pounds

\* Chemical releases calculated are based upon neutralized tank analysis prior to discharge.

\*\* Based on calculations during times of actual discharges for each individual neutralizing tank.

### 7.2 Miscellaneous Chemical Waste Releases

Miscellaneous chemical waste releases to the circulating water system from the retention pond for the period of July 1, 1982 to December 31, 1982 included 14,426,000 gallons of clear water waste. The waste water contained 1,468 pounds of suspended solids and 142,531 pounds of dissolved solids.\* When averaged over the reporting period, these discharges were 1.45% of the Technical Specification limit for dissolved solids and 0.033% of the Technical Specification limit for suspended solids.

Retention pond analysis and plant chemical records indicate that the following chemicals were released in the form of clear water waste from the retention pond.

Sodium	8,624 pounds
Chloride	13,308 pounds
Phosphate	168 pounds

The balance of the dissolved solids were in the form of soluble calcium and magnesium compounds resulting from the plant makeup water cold lime softening process.

\* Chemical release calculations are based on retention pond analyses during the period July 1, 1982 to December 31, 1982.

#### 8.0 CIRCULATING WATER SYSTEM OPERATIONS

The circulating water system operation during this reporting period for periods of plant operation is described in Table 8-1.

#### 9.0 LEAK TESTING OF RADIOACTIVE SOURCES

During the reporting period, all applicable sealed radioactive sources were leak tested according to Technical Specification requirement 15.4.12. Results of the leak testing showed no removable contamination equal to or greater than 0.005 microcuries from sealed radioactive sources.

TABLE 8-1

CIRCULATING WATER SYSTEM OPERATION

		<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Average Volume Cooling Water Discharge, Million Gal/Day	UNIT 1	524.6	523.9	557.2	554.4(2)	(2)	292.8(2)
	UNIT 2	571.6	562.1	584.2(1)	578.2	503.1	319.9
Average Cooling Water Intake Temperature Degrees F	UNIT 1	51.4	60.6	55.0	51.2(2)	(2)	37.7(2)
	UNIT 2	52.0	61.3	55.5(1)	49.7	41.1	38.9
Average Cooling Water Discharge Temperature Degrees F	UNIT 1	66.0	75.2	68.9	64.7(2)	(2)	58.4(2)
	UNIT 2	69.6	77.9	72.4(1)	66.2	61.0	69.2
Average Ambient Lake Temperature Degrees F	UNIT 1	54.5	62.6	55.9	50.0	40.4	38.4
	UNIT 2	(3)	(3)	(3)	(3)	(3)	(3)

(1) Unit 2 shut down for reactor coolant pump maintenance from September 25, 1982 to October 1, 1982.

(2) Unit 1 shut down for refueling from October 22, 1982 to December 8, 1982.

(3) Instrumentation was out-of-service