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February 27, 1998
1940-98-20117

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
1997 Effluent Release Report

Attached is a copy of the Oyster Creek Annual Radioactive Effluent Release Report for the period covering January through December 31, 1997. This submittal is made in accordance with 10 CFR 50.36(a)(2) and our Operating License and Technical Specifications.

If you should have any questions or require further information, please contact Ms. Brenda DeMerchant, OC Licensing Engineer, at 609-971-4642.

Very truly yours,

Michael B. Roche
Vice President & Director
Oyster Creek

MBR/BDeM/gl

Enclosure

000111

cc: Administrator, Region I
NRC Project Manager
NRC Sr. Resident Inspector
Chief, Bureau of Nuclear Engrg., NJ Dept. of Env. Protection

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EXECUTIVE SUMMARY

Oyster Creek Nuclear Station Effluent and Off Site Dose Report January 1, 1997 through December 31, 1997

This report summarizes the radioactive liquid and gaseous releases (effluents) from Oyster Creek and the calculated maximum hypothetical radiation exposure to the public resulting from these releases. This report covers the period of operation from January 1, 1997 through December 31, 1997.

Radiological releases from the plant are monitored by installed plant radiation monitors which survey the plant stack for gaseous releases to the atmosphere and outfall pipes for liquid discharges to the cooling water discharge canal. These monitors and associated sample analyses provide a means to accurately determine the type and quantities of radioactive materials being released to the environment.

Utilizing gaseous effluent data, the maximum hypothetical dose to any individual in the vicinity of the plant is calculated. Similarly, liquid effluent data are used to calculate a maximum hypothetical dose to an individual from liquid effluents for any shoreline exposure. Doses to the public from consumption of shellfish and fish withdrawn from the canal are also calculated.

Calculations of the maximum hypothetical dose to an individual from liquid and gaseous effluents are performed using a mathematical model which is based on the methods defined by the U.S. Nuclear Regulatory Commission.

The maximum hypothetical doses are conservative overestimates of the actual off site doses which are likely to occur. For example, the dose does not take into consideration the removal of radioactive material from the salt water by precipitation of insoluble salts, absorption onto sediment, or biological removal.

Dewatering is currently being performed in lieu of solidification.

Liquid discharges made during 1997 consisted of 0.01 curies of tritium from flushing of the fire service system.

Airborne discharges made during this same time period consisted of 148 curies of tritium, 0.00184 curies of particulates, 0.0154 curies of Iodines, and 21.9 curies of noble gases. This includes 30 curies of tritium from the isolation condensers.

The maximum hypothetical calculated organ dose to any individual due to gaseous effluents was about 0.046 millirem to the thyroid. The maximum hypothetical calculated whole body dose to any individual due to gaseous effluents was 0.045 mrem.

The maximum hypothetical calculated organ dose to any individual due to liquid effluents was about 0.0000001 mrem to the liver. The maximum hypothetical calculated whole body dose to any individual due to liquid effluents was 0.0000001 mrem.

EXECUTIVE SUMMARY

Oyster Creek Nuclear Station

Effluent and Off Site Dose Report

January 1, 1997 through December 31, 1997

Page 2

The total maximum hypothetical whole body dose of 0.045 mrem received by any individual from effluents from the Oyster Creek Nuclear Station for the reporting period is about 7,000 times lower than the dose the average individual in the Oyster Creek area received from natural background radiation including that from radon (300 mrem) during the same time period. Natural background radiation dose averages about 100 millirem whole body per year in the central New Jersey area. In addition, the average equivalent dose to the whole body from naturally occurring radon is about 200 millirem per year.

The maximum dose which could be received by a hypothetical individual from any effluent stream is about 0.3 percent of the annual guidelines established by the Nuclear Regulatory Commission.

Maximum Offsite Dose Due to Radionuclides in Effluents January -December 1997

<u>ODCM</u>	<u>4.6.1.1.4.A</u> Liquid Dose WB mrem	<u>4.6.1.1.4.A</u> Organ mrem	<u>4.6.1.1.6.A</u> Air Dose Beta mrem	<u>4.6.1.1.6.A</u> (GAS) Gamma mrem	<u>4.6.1.1.7.A</u> (Thyroid) Organ mrem	<u>4.6.1.1.8.A</u> (Liver) Organ mrem	<u>4.6.1.1.8.A</u> Whole Body mrem	<u>4.6.1.1.8.A</u> (Thyroid) Organ mrem
1997 Total	1.1E-7	1.1E-7	1.1E-5	1.5E-4	4.6E-2	4.5E-2	4.5E-2	4.6E-2
ODCM Limit	3	10	20	10	15	25	25	75
Fraction of Annual Limit	3.6E-8	1.1E-8	5.5E-7	1.5E-5	3.1E-3	1.8E-3	1.8E-3	6.1E-4

OYSTER CREEK NUCLEAR GENERATING STATION

LIQUID EFFLUENT RELEASES

Oyster Creek Nuclear Generating Station Policy is to strive for a zero liquid discharge of radioactive material. However, in 1997, 52,000 gallons of slightly contaminated water were released.

OFFSITE DOSE CALCULATION MANUAL

During the calendar year, a revision to the ODCM involved updates to the Radiological Environmental Monitoring Program (REMP), the addition of several documents to the "Reference" section, revision of specific air dispersion factors (X/Q) and numerous non-substantive changes. The number of annual samples and media in the REMP program were reduced. Specific air dispersion factors noted in the document's body were changed to match the values found in the appendices.

EFFLUENT MONITORS OUT OF SERVICE GREATER THAN 30 DAYS:

No effluent monitors were out of service for more than 30 days in 1997.

CHANGES TO THE PROCESS CONTROL PLAN:

There were no changes to the PCP in 1997.

Effluent and Waste Disposal Supplemental Information

FACILITY

Oyster Creek Nuclear Generating Station

LICENSEE

Owner: GPU, Inc.

Operator: GPU Nuclear

1.) Regulatory Limits

a. Fission and Activation Gases

Technical Specification 3.6.E

The gross radioactivity in noble gases discharged from the main condenser air ejector shall not exceed a $0.21/E$ Ci/sec after the holdup line, where E is the average gamma energy (Mev per atomic transformation).

ODCM 4.6.1.1.5.A

The dose equivalent rate outside of the EXCLUSION AREA due to radioactive noble gas in gaseous effluent shall not exceed 500 mrem/year to the total body or 3000 mrem/year to the skin. A value of 100 millirem total body is used due to the January 1, 1994 revision of 10 CFR 20.

ODCM 4.6.1.1.6.A

The air dose outside of the EXCLUSION AREA due to noble gas released in gaseous effluent shall not exceed:

5 mrad/calendar quarter due to gamma radiation,
10 mrad/calendar quarter due to beta radiation,
10 mrad/calendar year due to gamma radiation, or
20 mrad/calendar year due to beta radiation

ODCM 4.6.1.1.8.A

The annual dose to a MEMBER OF THE PUBLIC due to radiation and radioactive material in effluents from the OCNGS outside of the EXCLUSION AREA shall not exceed 75 mrem to his thyroid or 25 mrem to his total body or to any other organ.

b. Iodines and Particulates

ODCM 4.6.1.1.5.B

The dose equivalent rate outside of the EXCLUSION AREA due to H-3, I-131, I-133, and to radioactive material in particulates having half-lives of 8 days or more in gaseous effluents shall not exceed 1500 mrem/year to any body organ when the dose rate due to H-3, Sr-89, Sr-90, and alpha-emitting radionuclides is averaged over no more than 3 months and the dose rate due to other radionuclides is averaged over no more than 31 days.

ODCM 4.6.1.1.7.A

The dose to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, and from radionuclides in particulate form having half-lives of 8 days or more in gaseous effluents, outside of the EXCLUSION AREA shall not exceed 7.5 mrem to any body organ per calendar quarter or 15 mrem to any body organ per calendar year.

c. Liquid Effluents

ODCM 4.6.1.1.3.A

The concentration of radioactive material, other than noble gases, in liquid effluent in the discharge canal at the Route 9 bridge shall not exceed the concentrations specified in 10 CFR Part 20, Appendix B, Table II, Column 2.

ODCM 4.6.1.1.3.B

The concentration of noble gases dissolved or entrained in liquid effluent in the discharge canal at the Route 9 bridge shall not exceed 2×10^{-4} microcuries/milliliter.

ODCM 4.6.1.1.4.A

The dose to a MEMBER OF THE PUBLIC due to radioactive material in liquid effluents beyond the outside of the EXCLUSION AREA shall not exceed:

- 1.5 mrem to the total body during any calendar quarter,
- 5 mrem to any body organ during any calendar quarter,
- 3 mrem to the total body during any calendar year, or
- 10 mrem to any body organ during any calendar year.

2. Derived Air Concentrations (DAC)

a. Fission and Activation Gases:

Appendix B, Table II, Column 1 of 10 CFR 20

b. Iodines and Particulates:

Appendix B, Table II, Column 1 of 10 CFR 20

c. Liquid Effluents:

Appendix B, Table II, Column 2 of 10 CFR 20, except for dissolved or entrained noble gases where the limit is 2×10^{-4} uCi/ml

3. Measurements and Approximation of Total Radioactivity

a. Fission and Activation Gases:

1. Stack

The continuous recording of gross activity and the incorporation of isotopic data obtained from a weekly grab sample analyzed using gamma spectroscopy.

2. Augmented Offgas (AOG) Vent

The continuous recording of gross activity and the incorporation of isotopic data obtained from a monthly grab sample analyzed using gamma spectroscopy.

3. Turbine Building Stack and Feedpump Room Vent

The continuous recording of gross activity and the incorporation of isotopic data obtained from a monthly grab sample analyzed using gamma spectroscopy.

b. Iodines

1. Stack

Filters are changed weekly and analyzed using gamma spectroscopy.

2. AOG Vent

Filters are changed weekly and analyzed using gamma spectroscopy.

3. Turbine Building Stack and Feedpump Room Vent

Filters are changed weekly and analyzed using gamma spectroscopy.

c. Particulates

1. Stack

Filters are changed weekly and analyzed using a low background beta counter and gamma spectroscopy.

2. AOG Vent

Filters are changed weekly and analyzed using gamma spectroscopy.

3. Turbine Building Stack and Feedpump Room Vent

Filters are changed weekly and analyzed using gamma spectroscopy.

d. Liquid Effluents

Analysis per batch release using gamma spectrometry with a germanium detector, a low background beta counter, and a liquid scintillation counter.

OYSTER CREEK NUCLEAR GENERATING STATION
FIRST QUARTER 1997
GASEOUS EFFLUENT ELEVATED RELEASES

FISSION GASES	QUANTITY*
	(Ci)
XE135	1.24E+00
Total Fission Gases Released:	1.24E+00 Ci
Gamma Ebar:	0.2479
Average Rate of Release:	1.60E-01 uCi/sec

IODINES	QUANTITY
	(Ci)
I131	1.59E-04
I133	2.21E-04
Total Iodines Released:	3.80E-04 Ci
Average Rate of Release:	4.89E-05 uCi/sec

PARTICULATES	QUANTITY
	(Ci)
CR51	1.42E-05
SR89	6.19E-05
Total Particulates Released:	7.61E-05 Ci
Average Rate of Release:	9.79E-06 uCi/sec

RADIONUCLIDE	QUANTITY
	(Ci)
H3	1.02E+01
Avg. Rate of Release for H3:	1.32E+00 uCi/sec

*Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
FIRST QUARTER 1997
GASEOUS EFFLUENT GROUND-LEVEL RELEASES

FISSION GASES	QUANTITY* (Ci)
Total Fission Gases Released:	0.00E+00 Ci
Average Rate of Release:	0.00E+00 uCi/sec

IODINES	QUANTITY (Ci)
I131	1.10E-05
Total Iodines Released:	1.10E-05 Ci
Average Rate of Release:	1.41E-06 uCi/sec

PARTICULATES	QUANTITY (Ci)
GROSSA	4.87E-07
Total Particulates Released:	4.87E-07 Ci
Average Rate of Release:	6.26E-08 uCi/sec

RADIONUCLIDE	QUANTITY (Ci)
H3	7.70E+00
Avg. Rate of Release for H3:	9.90E-01 uCi/sec

* Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
SECOND QUARTER 1997
GASEOUS EFFLUENT ELEVATED RELEASES

FISSION GASES	QUANTITY*
	(Ci)
XE135	2.15E+00
Total Fission Gases Released:	2.15E+00 Ci
Gamma Ebar:	0.2479
Average Rate of Release:	2.73E-01 uCi/sec

IODINES	QUANTITY
	(Ci)
I131	6.40E-04
I133	2.29E-03
Total Iodines Released:	2.93E-03 Ci
Average Rate of Release:	3.72E-04 uCi/sec

PARTICULATES	QUANTITY
	(Ci)
MN54	5.83E-06
CO60	7.65E-06
SR89	8.54E-05
SR90	1.54E-06
CS137	2.29E-06
BA140	6.42E-05
Total Particulates Released:	1.67E-04 Ci
Average Rate of Release:	2.12E-05 uCi/sec

RADIONUCLIDE	QUANTITY
	(Ci)
H3	2.51E+01
Avg. Rate of Release for H3:	3.20E+00 uCi/sec

* Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
SECOND QUARTER 1997
GASEOUS EFFLUENT GROUND-LEVEL RELEASES

FISSION GASES	QUANTITY *
	(Ci)
Total Fission Gases Released:	0.00E+00 Ci
Average Rate of Release:	0.00E+00 uCi/sec

IODINES	QUANTITY
	(Ci)
I133	2.14E-06
Total Iodines Released:	2.14E-06 ci
Average Rate of Release:	2.72E-07 uCi/sec

PARTICULATES	QUANTITY
	(Ci)
SR90	5.09E-07
GROSSA	4.51E-07
Total Particulates Released:	9.60E-07 Ci
Average Rate of Release:	1.22E-07 uCi/sec

RADIONUCLIDE	QUANTITY
	(Ci)
H3	7.78E+00
Avg. Rate of Release for H3:	9.90E-01 uCi/sec

* Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
THIRD QUARTER 1997
GASEOUS EFFLUENT ELEVATED RELEASES

FISSION GASES	QUANTITY * (Ci)
KR85M	4.50E-02
KR87	5.77E-01
KR88	2.88E-01
XE133	1.29E-01
XE135	1.35E+01

Total Fission Gases Released: 1.45E+01 Ci
Average Ebar: 0.3013
Average Rate of Release: 1.83E+00 uCi/sec

IODINES	QUANTITY (Ci)
I131	1.38E-03
I133	6.95E-03

Total Iodines Released: 8.32E-03 Ci
Average Rate of Release: 1.05E-03 uCi/sec

PARTICULATES	QUANTITY (Ci)
MN54	5.60E-06
CO60	1.99E-05
SR89	3.60E-04
SR90	3.14E-06
CS137	2.64E-05
BA140	3.56E-04
GROSSA	1.19E-06

Total Particulates Released: 7.72E-04 Ci
Average Rate of Release: 9.71E-05 uCi/sec

RADIONUCLIDE	QUANTITY (Ci)
H3	4.28E+01

Avg. Rate of Release for H3: 5.38E+00 uCi/sec

* Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
THIRD QUARTER 1997
GASEOUS EFFLUENT GROUND-LEVEL RELEASES

FISSION GASES	QUANTITY *
	(Ci)
Total Fission Gases Released:	0.00E+00 Ci
Average Rate of Release:	0.00E+00 uCi/sec

IODINES	QUANTITY
	(Ci)
I131	6.70E-07
I133	5.23E-06
Total Iodines Released:	5.90E-06 Ci
Average Rate of Release:	7.43E-07 uCi/sec

PARTICULATES	QUANTITY
	(Ci)
GROSSA	5.33E-07
Total Particulates Released:	5.33E-07 Ci
Average Rate of Release:	6.71E-08 uCi/sec

RADIONUCLIDE	QUANTITY
	(Ci)
H3	7.87E+00
Avg. Rate of Release for H3:	9.90E-01 uCi/sec

* Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
FOURTH QUARTER 1997
GASEOUS EFFLUENT ELEVATED RELEASES

FISSION GASES	QUANTITY (Ci)
XE135	3.94E+00
Total Fission Gases Released:	3.94E+00 Ci
Average Ebar:	0.2479
Average Rate of Release:	4.96E-01 uCi/sec

IODINES	QUANTITY (Ci)
I131	5.31E-04
I133	3.24E-03
Total Iodines Released:	3.77E-03 Ci
Average Rate of Release:	4.75E-04 uCi/sec

PARTICULATES	QUANTITY (Ci)
CO60	1.64E-06
SR89	3.57E-04
SR90	1.18E-05
CS137	5.98E-06
BA140	4.43E-04
GROSSA	1.82E-06
Total Particulates Released:	8.21E-04 Ci
Average Rate of Release:	1.03E-04 uCi/sec

RADIONUCLIDE	QUANTITY (Ci)
H3	3.92E+01
Avg. Rate of Release for H3:	4.93E+00 uCi/sec

* Quantity of noble gases derived from gross activity.

OYSTER CREEK NUCLEAR GENERATING STATION
FOURTH QUARTER 1997
GASEOUS EFFLUENT GROUND-LEVEL RELEASES

FISSION GASES	QUANTITY *
	(ci)
Total Fission Gases Released:	0.00E+00 ci
Average Rate of Release:	0.00E+00 uCi/sec

IODINES	QUANTITY
	(ci)
Total Iodines Released:	0.00E+00 Ci
Average Rate of Release:	0.00E+00 uCi/sec

PARTICULATES	QUANTITY
	(Ci)
GROSSA	8.33E-07
Total Particulates Released:	8.33E-07 Ci
Average Rate of Release:	1.05E-07 uCi/sec

RADIONUCLIDE	QUANTITY
	(Ci)
H3	7.87E+00
Avg. Rate of Release for H3:	9.90E-01 uCi/sec

* Quantity of noble gases derived from gross activity.

LIQUID EFFLUENTS
Batch Tanks

For Period: 1- 1-97 0: 0 TO 12-31-97 0: 0

NUCLIDE RELEASED	QUANTITY (Ci)
Total	0.00E+00
NOBLE GASES Total	0.00E+00
TRITIUM	1.05E-02
GROSS ALPHA	0.00E+00

Volume of Waste Released Prior to Dilution: 5.19E+04 gal
Volume of Dilution Water Released: 1.21E+11 gal

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Waste Stream: Resins, Filters & Filter Media

WASTE CLASS	VOLUME ft ³	VOLUME M ³	CURIES SHIPPED	% ERROR (Ci)
A	715.6	20.3	4.53E+01	+/- 25%
B	921.4	26.1	1.17E+02	+/- 25%
C	.0	.0	1.62E+02	+/- 25%
ALL	1637.0	46.3	1.62E+02	+/- 25%

Estimates of major nuclide by waste class and stream: Resins, Filters & Filter Media
with 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
A	Co-60	42.661%	1.93E+01
	Fe-55	33.745%	1.53E+01
	Cs-137	13.650%	6.18E+00
	Mn-54	7.834%	3.55E+00
	Ni-63	.650%	2.94E-01
	H-3	.042%	1.89E-02
	Sr-90	.040%	1.81E-02
	Pu-241	.036%	1.65E-02
	Ni-59	.020%	8.85E-03
	Cm-242	.000%	1.10E-04
	I-129	.000%	0.00E+00
	Tc-99	.000%	0.00E+00
	C-14	.000%	0.00E+00
	Nb-94	.000%	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Estimates of major nuclide by waste class and stream: Resins, Filters & Filter Media with 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
B	Co-60	42.090%	4.93E+01
	Fe-55	27.884%	3.27E+01
	Cs-137	23.473%	2.75E+01
	Mn-54	4.061%	4.76E+00
	Ni-63	.531%	6.23E-01
	H-3	.161%	1.88E-01
	Pu-241	.035%	4.04E-02
	Sr-90	.029%	3.41E-02
	Ni-59	.005%	5.65E-03
	Cm-242	.000%	2.49E-05
	I-129	.000%	0.00E+00
	Tc-99	.000%	0.00E+00
	C-14	.000%	0.00E+00
	Nb-94	.000%	0.00E+00
ALL	Co-60	42.250%	6.86E+01
	Fe-55	29.517%	4.80E+01
	Cs-137	20.736%	3.37E+01
	Mn-54	5.112%	8.31E+00
	Ni-63	.564%	9.17E-01
	H-3	.128%	2.07E-01
	Pu-241	.035%	5.69E-02
	Sr-90	.032%	5.22E-02
	Ni-59	.009%	1.45E-02
	Cm-242	.000%	1.35E-04
	I-129	.000%	0.00E+00
	Tc-99	.000%	0.00E+00
	C-14	.000%	0.00E+00
	Nb-94	.000%	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Waste Stream: Evaporator Bottoms

Zero (0) waste shipped for above

Waste Stream: Irradiated Components

Zero (0) waste shipped for above

Waste Stream: Other Waste

Zero (0) waste shipped for above

**NRC Reg. Guide 1.21 Report
Report Date 2/4/98**

Reporting Period: 1/1/97 - 12/31/97

Waste Stream: Dry Active Waste (DAW) shipped offsite to a burial facility.

WASTE CLASS	VOLUME ft ³	VOLUME M ³	CURIES SHIPPED	% ERROR (Ci)
A	177.5	5.0	1.13E+00	+/- 25%
B	.0	.0	0.00E+00	+/- 25%
C	.0	.0	0.00E+00	+/- 25%
ALL	177.5	5.0	1.13E+00	+/- 25%

* - Combined Waste Type Shipment, Major Volume Waste Type Shown

Estimates of major nuclide by waste class and stream.

Waste Stream: DAW shipped to a burial facility with 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
A	Fe-55	42.743%	4.83E-01
	Co-60	35.044%	3.96E-01
	Cs-137	12.212%	1.38E-01
	Mn-54	6.416%	7.25E-02
	Ni-63	.424%	4.79E-03
	H-3	.031%	3.51E-04
	Sr-90	.027%	3.07E-04
	Pu-241	.020%	2.23E-04
	Ni-59	.005%	5.90E-05
	Cm-242	.000%	2.28E-06
	I-129	.000%	0.00E+00
	Tc-99	.000%	0.00+00
	C-14	.000%	0.00+00
	Nb-94	.000%	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Estimates of major nuclide by waste class and stream.

Waste Stream: DAW shipped offsite to a burial facility with 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
ALL	Fe-55	42.743%	4.83E-01
	Co-60	35.044%	3.96E-01
	Cs-137	12.212%	1.38E-01
	Mn-54	6.416%	7.25E-02
	Ni-63	.424%	4.79E-03
	H-3	.031%	3.51E-04
	Sr-90	.027%	3.07E-04
	Pu-241	.020%	2.23E-04
	Ni-59	.005%	5.90E-05
	Cm-242	.000%	2.28E-06
	I-129	.000%	0.00E+00
	Tc-99	.000%	0.00E+00
	C-14	.000%	0.00E+00
	Nb-94	.000%	0.00E+00

Waste Stream: Dry Active Waste (DAW)
 Shipped off-site to a volume reduction facility.

WASTE CLASS	VOLUME ft ³	VOLUME M ³	CURIES SHIPPED	% ERROR
A	10354.71	293.04	1.64	+/- 25%
B	0	0	0	+/- 25%
C	0	0	0	+/- 25%
ALL	10354.71	293.04	1.64	+/- 25%

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Estimates of major nuclide by waste class and stream.

Waste Stream: DAW shipped offsite to a volume reduction facility with 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
A	Fe-55	42.65%	6.99E-01
	Co-60	34.92%	5.73E-01
	Cs-137	12.14%	1.99E-01
	Mn-54	6.40%	1.05E-01
	Ni-63	0.042%	6.89E-03
	H-3	0.03%	4.92E-04
	Sr-90	0.03%	4.92E-04
	Pu-241	0.02%	3.28E-04
	Ni-59	0.01%	1.64E-04
	Cm-242	.000%	3.31E-06
	C-14	.000% (LLD)	0.00E+00
	Tc-99	.000% (LLD)	0.00E+00
	I-129	.000% (LLD)	0.00E+00

Estimates of major nuclides by waste class and stream.

Waste Stream: DAW shipped off-site to a volume reduction facility with a 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
ALL	Fe-55	42.65%	6.99E-01
	Co-60	34.92%	5.73E-01
	Cs-137	12.14%	1.99E-01
	Mn-54	6.40%	1.05E-01
	Ni-63	0.42%	6.89E-03
	H-3	0.03%	4.92E-04
	Sr-90	0.03%	4.92E-04
	Pu-241	0.02%	3.28E-04
	Ni-59	0.01%	1.64E-04
	Cm-242	.000%	3.31E-06
	C-14	.000% (LLD)	0.00E+00
	Tc-99	.000% (LLD)	0.00E+00
	I-129	.000% (LLD)	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Total of all waste shipped off-site for either disposal or volume reduction.

Waste Stream: All waste shipped off-site.

WASTE CLASS	VOLUME ft ³	VOLUME M ³	CURIES SHIPPED	% ERROR (Ci)
A	11247.81	318.34	4.81E+01	+/- 25%
B	921.4	26.1	1.17E+02	+/- 25%
C	0	0	0	+/- 25%
ALL	12169.21	344.44	1.651E+02	+/- 25%

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Estimates of major nuclide by waste class and stream.

Waste Stream: All waste shipped off-site for either disposal or volume reduction with 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
A	Co-60	42.653%	2.05E+01
	Fe-55	33.757%	1.62E+01
	Cs-137	13.649%	6.565E+00
	Mn-54	7.831%	3.767E+00
	Ni-63	0.650%	3.127E+01
	H-3	0.042%	2.02E-02
	Sr-90	0.040%	1.924E-02
	Pu-241	0.036%	1.732E-02
	Ni-59	0.020%	9.62E-03
	Cm-242	0.000%	1.12E-04
	I-129	.000%	0.00E+00
	Tc-99	.000%	0.00E+00
	C-14	.000%	0.00E+00
	Nb-94	.000%	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Estimates of major nuclide by waste class and stream

Waste Stream: All waste shipped off-site for either disposal or volume reduction with a 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
B	Co-60	42.090%	4.93E+01
	Fe-55	27.884%	3.27E+01
	Cs-137	23.473%	2.75E+01
	Mn-54	4.061%	4.76E+00
	Ni-63	0.531%	6.23E-01
	H-3	0.161%	1.88E-01
	Pu-241	0.035%	4.04E-02
	Sr-90	0.029%	3.41E-02
	Ni-59	0.005%	5.65E-03
	Cm-242	0.000%	2.49E-05
	I-129	0.000%	0.00E+00
	Tc-99	0.000%	0.00E+00
	C-14	0.000%	0.00E+00
	Nb-94	0.000%	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Estimates of major nuclides by waste class and stream.

Waste Stream: All waste shipped off-site for either disposal or volume reduction with a 1% cutoff.

WASTE CLASS	NUCLIDE NAME	PERCENT ABUNDANCE	CURIES
All	Co-60	42.247%	6.98E+01
	Fe-55	29.522%	4.89E+01
	Cs-137	20.733%	3.41E+01
	Mn-54	5.113%	8.527E+01
	Ni-63	0.564%	9.357E-01
	H-3	0.127%	2.082E-01
	Pu-241	0.035%	5.772E-02
	Sr-90	0.032%	5.33E-02
	Ni-59	0.009%	1.53E-02
	Cm-242	0.000%	1.37E-04
	I-129	0.000%	0.00E+00
	Tc-99	0.000%	0.00E+00
	C-14	0.000%	0.00E+00
	Nb-94	0.000%	0.00E+00

NRC Reg. Guide 1.21 Report
Report Date 2/4/98

Reporting Period: 1/1/97 - 12/31/97

Solid Waste disposition summary.

Number of Shipments	Mode of Transportation	Destination
11	Truck	Barnwell, SC
2	Truck	Oak Ridge, TN
1	Truck	Wampum, PA
4	Truck	Memphis, TN

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS A

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	1	14	69	50	4	0	138
NNE	SSW	1	8	15	12	0	0	36
NE	SW	1	12	20	8	1	0	42
ENE	WSW	3	11	47	16	0	0	77
E	W	2	25	55	33	3	0	118
ESE	WNW	2	14	94	67	6	0	183
SE	NW	2	21	92	44	1	0	160
SE	NNW	0	16	35	3	0	0	54
S	N	0	6	10	0	0	0	16
SSW	NNE	2	5	3	0	0	0	10
SW	NE	0	14	34	4	0	0	52
WSW	ENE	1	19	54	1	0	0	75
W	E	0	29	42	1	0	0	72
WNW	ESE	0	35	58	0	0	0	93
NW	SE	1	15	99	3	0	0	118
NNW	SSE	1	10	53	7	0	0	71
TOTAL		17	254	780	249	15	0	1315

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURLS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS B

SECTOR	WINDS TO FROM	WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	1	12	31	9	0	0	53
NNE	SSW	0	7	11	6	0	0	24
NE	SW	0	10	8	3	0	0	21
ENE	WSW	0	15	13	8	0	0	36
E	W	2	14	25	4	0	0	45
ESE	WNW	1	10	26	29	2	0	68
SE	NW	1	19	13	10	0	0	43
SSE	NNW	0	11	7	0	0	0	18
	N	1	8	1	0	0	0	10
SSW	NNE	1	7	0	0	0	0	8
SW	NE	1	6	5	2	0	0	14
WSW	ENE	0	18	5	0	0	0	23
W	E	0	14	7	1	0	0	22
WNW	ESE	0	8	5	0	0	0	13
NW	SE	0	9	10	0	0	0	19
NNW	SSE	1	7	21	1	0	0	30
TOTAL		9	175	188	73	2	0	447

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS C

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	0	4	13	4	0	0	21
NNE	SSW	1	4	9	3	0	0	17
NE	SW	1	4	7	4	3	0	19
ENE	WSW	0	6	9	2	1	0	18
E	W	0	9	13	10	0	0	32
ESE	WNW	0	7	15	8	0	0	30
SE	NW	2	16	11	8	2	0	39
SSE	NNW	1	13	5	1	0	0	20
	N	0	10	1	0	0	0	11
SSW	NNE	1	8	1	0	0	0	10
SW	NE	1	10	3	0	0	0	14
WSW	ENE	1	6	4	0	0	0	11
W	E	0	6	0	0	0	0	6
WNW	ESE	0	6	1	0	0	0	7
NW	SE	0	6	7	0	0	0	13
NNW	SSE	1	4	8	1	0	0	14
TOTAL		9	119	107	41	6	0	282

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS D

SECTOR	WINDS TO FROM	WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	9	55	85	25	2	1	177
NNE	SSW	5	37	74	23	9	4	152
NE	SW	9	23	36	20	4	0	92
ENE	WSW	10	45	48	17	1	0	121
E	W	13	51	77	13	3	0	157
ESE	WNW	12	64	89	43	5	0	213
SE	NW	16	78	69	24	0	0	187
SSE	NNW	20	70	28	8	0	0	126
	N	14	61	15	0	0	0	90
SSW	NNE	19	28	16	2	0	0	65
SW	NE	17	42	84	23	0	0	166
WSW	ENE	13	36	55	18	0	0	122
W	E	11	38	52	5	2	0	108
WNW	ESE	7	28	25	7	1	0	68
NW	SE	8	62	31	9	0	0	110
NNW	SSE	3	57	24	5	1	0	90
TOTAL		186	775	808	242	28	5	2044

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS E

SECTOR	WINDS TO FROM	WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	25	105	53	13	3	0	199
NNE	SSW	25	117	84	15	4	0	245
NE	SW	33	175	73	12	1	0	294
ENE	WSW	24	169	49	10	0	0	252
E	W	30	146	97	11	1	0	285
ESE	WNW	30	146	128	41	4	0	349
SE	NW	38	153	74	16	0	0	281
SSE	NNW	21	77	52	10	0	0	160
	N	15	48	22	0	0	0	85
SSW	NNE	14	26	28	1	0	0	69
SW	NE	10	27	36	37	0	0	110
WSW	ENE	8	23	17	14	3	0	65
W	E	9	34	24	3	0	0	70
WNW	ESE	5	10	17	1	0	0	33
NW	SE	9	23	10	5	0	0	47
NNW	SSE	16	28	14	9	2	0	69
TOTAL		312	1307	778	198	18	0	2613

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS F

SECTOR	WINDS TO FROM	WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	35	33	0	0	0	0	68
NNE	SSW	32	42	3	0	0	0	77
NE	SW	33	63	1	0	0	0	97
ENE	WSW	41	137	2	0	0	0	180
E	W	47	69	2	0	0	0	118
ESE	WNW	36	63	3	2	0	0	104
SE	NW	31	61	0	2	0	0	94
SSE	NNW	19	46	0	0	0	0	65
	N	8	9	1	0	0	0	18
SSW	NNE	7	4	0	0	0	0	11
SW	NE	6	1	0	2	0	0	9
WSW	ENE	5	1	1	0	0	0	7
W	E	4	1	1	0	0	0	6
WNW	ESE	2	2	0	0	0	0	4
NW	SE	5	5	0	0	0	0	10
NNW	SSE	15	2	0	0	0	0	17
TOTAL		326	539	14	6	0	0	885

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS G

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	23	13	0	0	0	0	36
NNE	SSW	27	13	0	0	0	0	40
NE	SW	60	44	0	0	0	0	104
ENE	WSW	177	161	0	0	0	0	338
E	W	183	94	1	0	0	0	278
ESE	WNW	99	22	0	0	0	0	121
SE	NW	96	36	0	1	0	0	133
SSE	NNW	37	30	0	0	0	0	67
	N	7	3	0	0	0	0	10
SSW	NNE	8	2	0	0	0	0	10
SW	NE	5	1	0	0	0	0	6
WSW	ENE	5	0	0	0	0	0	5
W	E	0	1	0	0	0	0	1
WNW	ESE	2	0	0	0	0	0	2
NW	SE	7	1	0	0	0	0	8
NNW	SSE	9	1	0	0	0	0	10
TOTAL		745	422	1	1	0	0	1169

OYSTER CREEK 33 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS ALL

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	94	236	251	101	9	1	692
NNE	SSW	91	228	196	59	13	4	591
NE	SW	137	331	145	47	9	0	669
ENE	WSW	255	544	168	53	2	0	1022
E	W	277	408	270	71	7	0	1033
ESE	WNW	180	326	355	190	17	0	1068
SE	NW	186	384	259	105	3	0	937
SSE	NNW	98	263	127	22	0	0	510
	N	45	145	50	0	0	0	240
SSW	NNE	52	80	48	3	0	0	183
SW	NE	40	101	162	68	0	0	371
WSW	ENE	33	103	136	33	3	0	308
W	E	24	123	126	10	2	0	285
WNW	ESE	16	89	106	8	1	0	220
NW	SE	30	121	157	17	0	0	325
NNW	SSE	46	109	120	23	3	0	301
TOTAL		1604	3591	2676	810	69	5	8755

Hours of Missing/Invalid Data: 5

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS A

SECTOR WINDS		WIND SPEED						TOTAL
		TO	FROM	1-3	4-7	8-12	13-18	
N	S	0	0	0	1	1	1	3
NNE	SSW	0	0	0	0	5	2	7
NE	SW	0	0	0	0	1	0	1
ENE	WSW	0	0	1	2	4	1	8
E	W	0	0	0	2	3	6	11
ESE	WNW	0	0	0	5	22	10	37
SE	NW	0	0	1	9	14	8	32
SE	NNW	0	0	0	0	0	0	0
S	N	0	0	0	0	0	0	0
SSW	NNE	0	0	0	0	0	0	0
SW	NE	0	0	0	1	0	0	1
WSW	ENE	0	0	0	1	0	0	1
W	E	0	0	0	0	0	0	0
WNW	ESE	0	0	1	0	0	0	1
NW	SE	0	0	2	2	0	0	4
NNW	SSE	0	0	1	3	0	0	4
TOTAL		0	0	6	26	50	28	110

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS B

SECTOR	WINDS TO FROM	WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	0	0	1	13	8	1	23
NNE	SSW	0	0	0	9	10	2	21
NE	SW	0	0	2	3	1	0	6
ENE	WSW	0	0	3	7	7	1	18
E	W	0	0	9	13	8	7	37
ESE	WNW	0	0	0	17	12	13	42
SE	NW	0	0	8	29	17	10	64
SSE	NNW	0	0	1	5	4	1	11
	N	0	0	2	2	0	0	4
SSW	NNE	0	0	0	1	0	0	1
SW	NE	0	0	3	4	2	0	9
WSW	ENE	0	0	6	11	1	0	18
W	E	0	0	8	3	0	0	11
WNW	ESE	0	0	11	2	0	0	13
NW	SE	0	0	11	5	0	0	16
NNW	SSE	0	1	3	11	0	0	15
TOTAL		0	1	68	135	70	35	309

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS C

SECTOR	WINDS TO FROM	WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	0	3	7	29	4	0	43
NNE	SSW	0	2	4	16	5	4	31
NE	SW	0	3	5	6	3	1	18
ENE	WSW	0	1	8	14	4	2	29
E	W	0	1	14	22	12	5	54
ESE	WNW	0	0	19	26	31	22	98
SE	NW	0	1	16	34	20	17	88
SSE	NNW	0	1	9	11	5	0	26
	N	0	3	3	3	0	0	9
SSW	NNE	0	0	1	0	0	0	1
SW	NE	0	3	14	10	5	1	33
WSW	ENE	0	0	19	7	2	0	28
W	E	0	5	28	3	1	0	37
WNW	ESE	0	2	26	2	0	0	30
NW	SE	1	0	33	9	0	0	43
NNW	SSE	0	0	8	17	0	0	25
TOTAL		1	25	214	209	92	52	593

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS D

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	2	20	57	79	27	9	194
NNE	SSW	11	13	41	104	58	40	267
NE	SW	2	23	37	36	31	29	158
ENE	WSW	3	12	46	72	30	27	190
E	W	3	13	55	96	67	34	268
ESE	WNW	5	21	63	99	105	121	414
SE	NW	9	34	79	95	74	78	369
SSE	NNW	5	26	57	60	36	23	207
	N	5	32	50	53	4	0	144
SSW	NNE	7	36	35	23	7	3	111
SW	NE	6	25	39	57	48	43	218
WSW	ENE	3	25	58	50	46	41	223
W	E	6	28	41	36	44	6	161
WNW	ESE	4	38	45	23	13	7	130
NW	SE	6	30	76	41	6	8	167
NNW	SSE	4	19	102	46	7	1	179
TOTAL		81	395	881	970	603	470	3400

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

HOURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS E

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	2	10	31	56	34	18	151
NNE	SSW	13	9	24	110	90	21	267
NE	SW	7	7	26	90	129	41	300
ENE	WSW	7	7	23	58	96	23	214
E	W	1	9	21	47	79	24	181
ESE	WNW	2	7	28	97	150	45	329
SE	NW	1	7	30	109	93	31	271
SSE	NNW	1	5	19	68	63	30	186
	N	4	3	31	52	9	0	99
SSW	NNE	2	8	33	21	9	3	76
SW	NE	3	10	18	14	14	46	105
WSW	ENE	2	5	12	17	5	15	56
W	E	2	7	8	20	13	8	58
WNW	ESE	3	14	9	7	16	10	59
NW	SE	2	11	11	13	10	12	59
NNW	SSE	2	9	16	22	7	7	63
TOTAL		54	128	340	801	817	334	2474

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS F

SECTOR WINDS TO FROM		WIND SPEED						TOTAL
		1-3	4-7	8-12	13-18	19-24	>24	
N	S	2	7	15	16	6	1	47
NNE	SSW	4	10	20	21	15	0	70
NE	SW	2	11	14	37	33	24	121
ENE	WSW	2	2	12	36	39	31	122
E	W	0	4	10	31	52	14	111
ESE	WNW	0	3	21	52	49	14	139
SE	NW	1	3	14	39	52	11	120
SSE	NNW	3	8	9	35	53	7	115
	N	3	6	22	40	10	0	81
SSW	NNE	1	6	10	8	1	0	26
SW	NE	4	8	11	4	2	0	29
WSW	ENE	2	3	1	9	0	0	15
W	E	2	3	4	2	0	0	11
WNW	ESE	2	2	4	1	0	0	9
NW	SE	1	3	6	0	0	0	10
NNW	SSE	2	4	7	1	1	1	16
TOTAL		31	83	180	332	313	103	1042

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS G

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	1	11	17	7	2	0	38
NNE	SSW	2	16	18	4	2	0	42
NE	SW	3	10	12	21	17	1	64
ENE	WSW	1	3	12	22	31	13	82
E	W	0	4	22	40	38	4	108
ESE	WNW	0	10	17	43	18	3	91
SE	NW	1	10	30	31	15	1	88
SSE	NNW	2	13	22	20	9	2	68
	N	5	5	30	42	7	0	89
SSW	NNE	1	8	18	10	1	0	38
SW	NE	5	7	10	4	0	0	26
WSW	ENE	1	3	14	5	0	0	23
W	E	1	2	4	3	0	0	10
WNW	ESE	2	5	7	0	0	0	14
NW	SE	1	6	8	2	0	0	17
NNW	SSE	1	5	14	1	1	0	22
TOTAL		27	118	255	255	141	24	820

OYSTER CREEK 380 FOOT DATA
 JOINT FREQUENCY TABLES
 VERSION: 97.6 PRINTED 02-13-1998

OURS AT EACH WIND SPEED AND DIRECTION
 PERIOD OF RECORD 97010100 TO 97123123
 STABILITY CLASS ALL

SECTOR WINDS		WIND SPEED						TOTAL
TO	FROM	1-3	4-7	8-12	13-18	19-24	>24	
N	S	7	51	128	201	82	30	499
NNE	SSW	30	50	107	264	185	69	705
NE	SW	14	54	96	193	215	96	668
ENE	WSW	13	25	105	211	211	98	663
E	W	4	31	131	251	259	94	770
ESE	WNW	7	41	148	339	387	228	1150
SE	NW	12	55	178	346	285	156	1032
SSE	NNW	11	53	117	199	170	63	613
	N	17	49	138	192	30	0	426
SSW	NNE	11	58	97	63	18	6	253
SW	NE	18	53	95	94	71	90	421
WSW	ENE	8	36	110	100	54	56	364
W	E	11	45	93	67	58	14	288
WNW	ESE	11	61	103	35	29	17	256
NW	SE	11	50	147	72	16	20	316
NNW	SSE	9	38	151	101	16	9	324
TOTAL		194	750	1944	2728	2086	1046	8748

Hours of Missing/Invalid Data: 12

OYSTER CREEK 33 FOOT DATA
WIND ROSE TABLE
VERSION: 97.6 PRINTED 02-13-1998

FOR THE PERIOD 97010100 TO 97123123

SECTOR	<3.5 MPH	3.5 TO 7.5	7.5 TO 12.5	>12.5 MPH	TOTAL
N	0.0107	0.0269	0.0287	0.0127	0.0790
NNE	0.0104	0.0260	0.0224	0.0087	0.0675
NE	0.0156	0.0378	0.0166	0.0064	0.0764
ENE	0.0291	0.0621	0.0192	0.0063	0.1167
E	0.0316	0.0466	0.0308	0.0089	0.1179
ESE	0.0205	0.0372	0.0405	0.0236	0.1219
SE	0.0212	0.0438	0.0296	0.0123	0.1070
SSE	0.0112	0.0300	0.0145	0.0025	0.0582
S	0.0051	0.0166	0.0057	0.0000	0.0274
SSW	0.0059	0.0091	0.0055	0.0003	0.0209
WSW	0.0046	0.0115	0.0185	0.0078	0.0424
WSW	0.0038	0.0118	0.0155	0.0041	0.0352
W	0.0027	0.0140	0.0144	0.0014	0.0325
WNW	0.0018	0.0102	0.0121	0.0010	0.0251
NW	0.0034	0.0138	0.0179	0.0019	0.0371
NNW	0.0053	0.0124	0.0137	0.0030	0.0344

FRACTION OF MISSING / INVALID DATA : 0.0006