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Technical Specification 6.9.1.d

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U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555 - 0001

Oyster Creek Nuclear Generating Station
Renewed Facility Operating License No. DPR-16
NRC Docket No. 50-219

Independent Spent Fuel Storage Facility
NRC Docket No. 72-15

Subject: Annual Radioactive Effluent Release Report for 2012

Enclosed with this cover letter is the Annual Radioactive Effluent Release Report for the period January 1 to December 31, 2012. This report includes the Oyster Creek Nuclear Generating Station Independent Spent Fuel Storage Facility.

If any further information or assistance is needed, please contact Dave Chernesky, Chemistry Manager, at 609-971-4217.

Sincerely,

Gary L. Stathes
Vice President – Oyster Creek Nuclear Generating Station

Enclosure: 2012 Annual Radioactive Effluent Release Report

cc: Administrator, USNRC Region I (w/o attachment)
USNRC Senior Project Manager, Oyster Creek (w/o attachment)
USNRC Senior Resident Inspector, Oyster Creek (w/o attachment)
Craig Stewart, American Nuclear Insurers

IE48
NIM5526



Exelon Generation®



Annual Radioactive Effluent Release Report

2012

Oyster Creek Generating Station

Oyster Creek 2012 Annual Radioactive Effluent Release Report

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

January 1, 2012 through December 31, 2012

EXELON GENERATION COMPANY, LLC

OYSTER CREEK GENERATING STATION

DOCKET NO. 50-219 (Oyster Creek Generating Station)

DOCKET NO. 72-15 (Independent Spent Fuel Storage Facility)

**Submitted to
The United States Nuclear Regulatory Commission
Pursuant to
Renewed Facility Operating License DPR-16**

Oyster Creek 2012 Annual Radioactive Effluent Release Report

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EXECUTIVE SUMMARY

Effluents are strictly monitored to ensure that radioactivity released to the environment is as low as reasonably achievable and does not exceed regulatory limits. Effluent control includes the operation of monitoring systems, in-plant and environmental sampling and analyses programs, quality assurance programs for effluent and environmental programs, and procedures covering all aspects of effluent and environmental monitoring.

Both radiological environmental and effluent monitoring indicate that the operation of Oyster Creek Generating Station (OCGS) does not result in significant radiation exposure of the people or the environment surrounding OCGS and is well below the applicable levels set by the Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency (EPA).

There were liquid radioactive effluent releases during 2012 of concentrations of tritium too low to detect at an LLD of 200 picocuries per liter (pCi/L) at the New Jersey Pollution Discharge Elimination System (NJPDDES) permitted main condenser outfall. The releases were part of nearly continuous pumping of groundwater at approximately 70 gpm containing low levels of tritium and no detectable gamma. Exelon and the State of New Jersey Department of Environmental Protection (NJDEP) agreed to this remediation action instead of natural attenuation to address concentrations of tritium in groundwater. Well 73 and supporting equipment and piping were installed to pump groundwater to the intake structure at the inlet of the main circulating water pumps. Provisions were established for both batch and continuous releases of groundwater. Continuous releases occurred approximately 257 days in 2012. The Continuous releases occurred from January 1, 2012 through December 31, 2012 with a total of 2.49E+07 gallons of groundwater pumped resulting in 3.30E-01 Ci of tritium released to the discharge canal. The dose to the most limiting member of the public due to the release of groundwater was 1.55E-06 mrem.

There were no liquid or gaseous abnormal releases during 2012.

The maximum hypothetical calculated organ dose (Bone) from iodines, tritium, carbon-14 (C-14), and particulates to any individual due to gaseous effluents was 5.60E-01 mrem, which was approximately 3.73E+00 percent of the annual limit of 15 mrem. The majority of organ dose from gaseous effluents was due to C-14. The maximum calculated gamma air dose in the UNRESTRICTED AREA due to noble gas effluents was 7.11E-03 mrad, which was 7.11E-02 percent of the annual 10 CFR 50 Appendix I, As Low As Reasonably Achievable (ALARA) limit of 10 mrad.

For comparison, the background radiation dose averages approximately 300 mrem per year in the Central New Jersey area, which includes approximately 200 mrem from naturally occurring radon gas and 100 mrem from background radiation.

The Independent Spent Fuel Storage Installation (ISFSI) is a closed system and the only exposure is due to direct radiation. Based on offsite TLD readings, dose due to direct radiation from the ISFSI was less than 1 mrem for 2012. Because it is a sealed unit, no radioactive material was released.

Comparison of environmental sampling results to iodine and particulate gaseous effluents released, showed no radioactivity attributable to the operation of OCGS. Both elevated and

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ground-level release paths were considered in this review, with total iodines released of $7.30\text{E-}03$ Ci and total particulates with half-lives greater than 8 days less C-14 released of $6.31\text{E-}02$ Ci.

Joint Frequency Tables of meteorological data, per Stability Classification Category, as well as for all stability classes, are included. All data was collected from the on-site Meteorological Facility. Data recoveries for the 380-foot data and the 33-foot data were 97.7 percent and 97.9 percent, respectively. The UFSAR commits to Regulatory Guide (RG) 1.23 for Meteorological Facility data recovery. RG 1.23 requires data recovery of at least 90% on an annual basis.

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1 Introduction

In accordance with the reporting requirements of Technical Specification 6.9.1.d applicable during the reporting period, this report summarizes the effluent release data for OCGS for the period January 1, 2012 through December 31, 2012. This submittal complies with the format described in Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants", Revision 1, June 1974.

Meteorological data was reported in the format specified in Regulatory Guide 1.23, Revision 1, "Meteorological Monitoring Programs for Nuclear Power Plants".

All vendor results were received and included in the report calculations. Therefore the 2012 report is complete.

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2 Supplemental Information

Oyster Creek Generating Station

Exelon Generation Company, LLC

A. Regulatory Limits:

Limit	Units	Receptor	ODCM and 10 CFR 50, Appendix I Design Objective Limits
1. Noble Gases:			
a. ≤ 500	mrem/yr	Total Body	ODCM Control 3.11.2.1
≤ 3000	mrem/yr	Skin	
b. ≤ 5	mrad	Air Gamma	Quarterly air dose limits ODCM Control 3.11.2.2
≤ 10	mrad	Air Beta	
c. ≤ 10	mrad	Air Gamma	Yearly air dose limits ODCM Control 3.11.2.2
≤ 20	mrad	Air Beta	
d. < 5	mrem	Total Body (Gamma)	10 CFR 50, Appendix I, Section II.B.2(b)
< 15	mrem	Skin (Beta)	
2. Iodines, Tritium, Particulates with Half Life > 8 days:			
a. ≤ 1500	mrem/yr	Any Organ	ODCM Control 3.11.2.1
b. ≤ 7.5	mrem	Any Organ	Quarterly dose limits ODCM Control 3.11.2.3
c. ≤ 15	mrem	Any Organ	Yearly dose limits ODCM Control 3.11.2.3
3. Liquid Effluents			
a.	Concentration 10 CFR 20, Appendix B, Table 2 Column 2		ODCM Control 3.11.1.1
b. ≤ 1.5	mrem	Total Body	Quarterly dose limits ODCM Control 3.11.1.2
≤ 5	mrem	Any Organ	
c. ≤ 3	mrem	Total Body	Yearly dose limits ODCM Control 3.11.1.2
≤ 10	mrem	Any Organ	

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B. Effluent Concentration Limits:

Gaseous dose rates rather than effluent concentrations are used to calculate permissible release rates for gaseous releases. The maximum permissible dose rates for gaseous releases are defined in ODCM Controls 3.11.2.1.

The Effluent Concentration Limit (ECL) specified in 10 CFR 20, Appendix B, Table 2, Column 2 for identified nuclides, were used to calculate permissible release rates and concentrations for liquid release per ODCM Controls 3.11.1.1. The total activity concentration at the Route 9 bridge for all dissolved or entrained gases was limited to $< 2E-04 \mu\text{Ci/ml}$.

C. Average Energy (\bar{E}):

The Oyster Creek ODCM limits the instantaneous dose equivalent rates due to the release of noble gases to less than or equal to 500 mrem/year to the total body and less than or equal to 3000 mrem/year to the skin. The average beta and gamma energies (\bar{E}) of the radionuclide mixture in releases of fission and activation gases as described in Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plant", may be used to calculate doses in lieu of more sophisticated software. The Oyster Creek radioactive effluent program employs the methodologies presented in U.S. NRC Regulatory Guide 1.109 "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," Revision 1, October 1977. Therefore, average energy (\bar{E}) as described in Regulatory Guide 1.21 is not applicable to Oyster Creek.

D. Measurements and Approximations of Total Radioactivity:

1. Fission and Activation Gases

The method used for Gamma Isotopic Analysis is the Canberra Gamma Spectroscopy System with a gas Marinelli beaker. Airborne effluent gaseous activity was continuously monitored and recorded in accordance with the Off Site Dose Calculation Manual (ODCM) Table 4.11.2.1.2-1. Additional grab samples were taken from the stack Radioactive and Gaseous Effluent Monitoring System (RAGEMS) sample point and ground-level release sample points and analyzed at least monthly to determine the isotopic mixture of noble gas activity released for the month. If activity was found in the grab isotopic analysis, the results are entered into Simplified Environmental Effluent Dosimetry System (SEEDS) to calculate dose and dose rates. If no activity is detected in the stack grab samples, post treatment or Off Gas Isotopic Analysis data may be used.

2. Iodines

The method used for Gamma Isotopic Analysis is the Canberra Gamma Spectroscopy System with a charcoal cartridge. Iodine activity was continuously sampled and analyzed in accordance with ODCM Table 4.11.2.1.2-1. Charcoal samples are taken from the stack RAGEMS sample point and

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ground-level release sample points and analyzed at least weekly to determine the total activity released from the plant based on the average vent flow rates recorded for the sampling period.

3. Particulates (half-lives > 8 days)

The method used for Gamma Isotopic Analysis is the Canberra Gamma Spectroscopy System with a particulate filter (47 mm). Particulate activity was continuously sampled and analyzed in accordance with ODCM Table 4.11.2.1.2-1. Particulate samples are taken from the stack RAGEMS sample point and ground-level release sample points and analyzed at least weekly to determine the total activity released from the plant based on the average vent flow rates recorded for the sampling period.

4. Tritium

A. Gaseous Effluents

Air from stack and vent effluents was passed through a desiccant column and distilled to remove the moisture collected. An aliquot of the water from the distillate was analyzed for tritium using a liquid scintillation counter.

B. Liquid Effluents

Water from liquid effluents was analyzed for tritium using a liquid scintillation counter.

5. Gross Alpha

Gross alpha was measured by an off-site vendor for both the gas and liquid effluent composite samples.

6. Hard-To-Detects

Hard-To-Detects was measured by an off-site vendor for one set of gas monthly composites. The analysis included Fe-55, I-129, Ni-59, Ni-63, Tc-99, Am-241, Cm-242, Cm-243/244, Pu-238, Pu-239/240 and Pu241. The results of this analysis are utilized until the next Hard-To-Detect analysis is performed. In addition, Hard-To-Detects were measured for the month of November when the plant was shut down.

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7. Carbon-14 (C-14)

The amount of C-14 (Ci) released was estimated using the guidance from EPRI Technical Report 1021106, Estimation of Carbon-14 in Nuclear Power Plant Gaseous Effluents. The C-14 was released primarily through the stack (97%) with a small amount (3%) released through plant vents. The activity in liquid effluents was determined to not be significant.

The offsite dose from C-14 was calculated using SEEDS, which uses approved ODCM methodologies. The resulting annual dose to a child from gaseous releases of C-14 is about 4.67E-01 mrem to the bone.

8. Liquid Effluents

Groundwater containing tritium was released during 2012. For continuous releases, tritium and principal gamma emitters were determined for a composite sample daily. The concentration of tritium is limited to ensure concentrations were less than 200 pCi/l in the discharge canal. The gamma emitters were limited to less than detectable concentrations. Gross alpha and Hard-to-detect analyses (Fe-55, Ni-63, Sr-89 and Sr-90) were determined for monthly composite samples for each type of release (batch or continuous).

The leaks into the groundwater were reported in the 2009 Annual Radioactive Effluent Release Report as abnormal releases. Estimates of the curies of the tritium releases were reported. Doses due to the release of the groundwater to the discharge canal were included in the report. To ensure that amount of activity discharge is accurate and limiting, the activity and doses as a result of discharges during 2012 from the groundwater remediation project are included in this report.

9. Estimated Total Error Present

Procedure CY-AA-170-2100, Estimated Errors of Effluent Measurements, provides the methodology to obtain an overall estimate of the error associated with radioactive effluents.

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10. Composite Samples and Lower Limit of Detection (LLD)

Particulate air samples were composited monthly and analyzed for gross alpha, Sr-89 and Sr-90. Groundwater batch and continuous releases were composited at least monthly and analyzed for gross alpha, Sr-89, Sr-90, Fe-55 and Ni-63. These composites are submitted to an offsite vendor laboratory for analysis. The ODCM required LLD for liquid and airborne releases are as follows:

Liquid:	LLD
Principal Gamma Emitters (Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, I-131, Ce-141, Cs-134, Cs-137)	5E-07 µCi/ml
Principal Gamma Emitters (Ce-144)	5E-06 µCi/ml
Dissolved and Entrained Gases	1E-05 µCi/ml
H-3	1E-05 µCi/ml
Gross Alpha	1E-07 µCi/ml
Sr-89 and Sr-90	5E-08 µCi/ml
Fe-55 and Ni-63	1E-06 µCi/ml
Airborne	LLD
Principal Gamma Emitters (Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, Xe-138)	1E-04 µCi/ml
H-3	1E-06 µCi/ml
I-131	1E-12 µCi/ml
I-133	1E-10 µCi/ml
Principal Gamma Emitters (Mn-54, Fe-59, Co-58, Co-60, Zn-65, Cs-134, Cs-137, Ce-141)	1E-11 µCi/ml
Principal Gamma Emitters (Mo-99, Ce-144)	1E-10 µCi/ml
Gross Alpha	1E-11 µCi/ml
Sr-89, Sr-90	1E-11 µCi/ml

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E. Batch Releases:

1. Liquid

There were no batch releases of liquid effluents during 2012.

2. Gaseous

There were no batch releases of gaseous effluents during 2012.

F. Abnormal Releases:

There were no abnormal liquid or gaseous releases during 2012.

G. Revisions to the ODCM:

There were no revisions to the ODCM during 2012.

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H. Radiation Effluent Monitors Out of Service More Than 30 Days

Per ODCM Control 3.3.3.10, "Radioactive Liquid Effluent Monitoring Instrumentation" and 3.3.3.11, Radioactive Gaseous Effluent Monitoring Instrumentation requires:

With less than the minimum number of radioactive liquid/gaseous effluent monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.3.3.10-1/3.3.3.11-1. Make every reasonable effort to return the instrument to OPERABLE status within 30 days and, if unsuccessful, explain in the next Radioactive Effluent Release Report why the inoperability was not corrected in a timely manner.

The following is a discussion of instrumentation out of service for greater than 30 days:

1. The Offgas Building Exhaust Gaseous Effluent Radioactive Noble Gas Monitor was out of service from 7/31/2012 through 9/28/2012. The monitor was taken out of service 7/31/2012 for failing the monitor functional test. The original issue for the monitor failing the functional test was a faulty pushbutton on the alarm panel causing the alarm not to function. Parts were ordered and replaced on 8/17/12 but the alarm still did not function as expected. After multiple troubleshooting attempts it was determined that the original part replaced had internal wiring that was different than the original part which resulted in opposite actuation compared to the original part. After changing the wiring in the alarm panel, all alarms responded as expected. This issue was entered into our Corrective Action Program (CAP) and corrective actions taken have been documented per process.

I. Releases from the Independent Spent Fuel Storage Facility:

The ISFSI is a closed system and the only exposure would be due to direct radiation. This includes iodines, particulates, and noble gases. Based on offsite TLD readings, dose due to direct radiation from the ISFSI was less than 1 mrem for 2012. Because it is a sealed unit, no radioactive material was released.

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J. Program Deviations:

1. A turbine building (TB) effluent noble gas grab sample was not collected for September 2012. This sample is a requirement of Table 4.11.2.1.2-1, Radioactive Gaseous Waste Sampling and Analysis Program, of CY-OC-170-301, ODCM for Oyster Creek. The September sample was originally scheduled to be collected 8/31/12, but was rescheduled to occur the following week so it could be collected in September. The sample was not rescheduled and tracked by the Chemistry Supervisor adequately, and a sample was not collected until the scheduled October sample 10/5/12. Historical data from September's TB RAGEMS low range monitor was trended against the data from August and October with no discrepancies noted. There were no isotopes identified in the Noble Gas Grab Samples from August and October. This issue was entered into our Corrective Action Program (CAP) and corrective actions taken have been documented per process.
2. The groundwater remediation composite sampler was found out of service for less than eight hours on October 19, 2012. The composite sampler is required by ODCM Table 4.11.1.1.1-1, Radioactive Liquid Waste Sampling and Analysis Program. There was enough sample in the composite sampler to perform the required analyses and the composite sampler was immediately returned to service. This issue was entered into our Corrective Action Program (CAP) and corrective actions taken have been documented per process.

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Appendix A Effluent and Waste Disposal Summary

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Table A-1: Gaseous Effluents - Summary Of All Releases

Period: January 1, 2012 through December 31, 2012

Unit: Oyster Creek

A. Fission & Activation Gases	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release	Ci	4.28E+01	5.49E+01	6.10E+01	5.04E+01	25.00%
2. Average Release Rate for Period	µCi/sec	5.44E+00	6.99E+00	7.67E+00	6.34E+00	
3. Gamma Air Dose	mrad	1.72E-03	2.70E-03	3.69E-03	1.47E-03	
4. Beta Air Dose	mrad	9.49E-04	1.06E-03	4.93E-03	3.41E-04	
5. Percent of ODCM Limit						
- Gamma Air Dose	%	3.44E-02	5.40E-02	7.38E-02	2.94E-02	
- Beta Air Dose	%	9.49E-03	1.06E-02	4.93E-02	3.41E-03	
B. Iodines						
1. Total – I-131	Ci	3.82E-04	5.50E-04	1.07E-03	6.37E-04	25.00%
2. Average Release Rate for Period	µCi/sec	4.86E-05	7.00E-05	1.35E-04	8.02E-05	
3. Percent of ODCM limit	%	*	*	*	*	
C. Particulate						
1. Particulates with T 1/2 > 8 days	Ci	1.54E-02	1.44E-02	1.73E-02	1.60E-02	25.00%
2. Average Release Rate for Period	µCi/sec	1.96E-03	1.83E-03	2.17E-03	2.01E-03	
3. Percent of ODCM limit	%	*	*	*	*	
D. Tritium						
1. Total Release	Ci	1.07E+01	1.06E+01	9.27E+00	1.04E+01	25.00%
2. Average Release Rate for Period	µCi/sec	1.36E+00	1.34E+00	1.17E+00	1.30E+00	
3. Percent of ODCM limit	%	*	*	*	*	
E. Gross Alpha						
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	25.00%
2. Average Release Rate for Period	µCi/sec	<LLD	<LLD	<LLD	<LLD	
3. Percent of ODCM limit	%	*	*	*	*	
F. Carbon-14						
1. Total Release	Ci	2.49E+00	2.49E+00	2.53E+00	2.53E+00	
2. Average Release Rate for Period	µCi/sec	3.17E-01	3.17E-01	3.18E-01	3.18E-01	
3. Percent of ODCM limit	%	*	*	*	*	
G. Iodine 131 & 133, Tritium & Particulate						
1. Organ Dose	mrem	3.74E-02	1.58E-01	2.44E-01	1.23E-01	
2. Percent of ODCM Limit	%	4.99E-01	2.11E+00	3.25E+00	1.64E+00	

* ODCM Limit is for combined Iodine, tritium, Carbon-14 and particulate only, which is shown in Item G.

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Table A-2: Gaseous Effluents Release Point: Elevated Release

Period: January 1, 2012 through December 31, 2012

Unit: Oyster Creek

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1. Fission gases									
Kr- 85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr- 85m	Ci	8.22E-01	3.03E+00	1.96E+00	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	4.65E+00	4.87E+00	6.80E+00	1.11E+00	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	3.50E+00	1.02E+01	5.03E+00	1.16E+01	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	2.03E+00	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	3.12E+01	3.35E+01	3.89E+01	3.56E+01	<LLD	<LLD	<LLD	<LLD
Xe-135m	Ci	<LLD	6.61E-01	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	2.60E+00	2.67E+00	7.36E+00	<LLD	<LLD	<LLD	<LLD	<LLD
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	4.28E+01	5.49E+01	6.01E+01	5.03E+01	<LLD	<LLD	<LLD	<LLD
2. Iodines									
I-131	Ci	3.82E-04	5.50E-04	1.07E-03	6.29E-04	<LLD	<LLD	<LLD	<LLD
I-133	Ci	6.19E-04	1.09E-03	2.02E-03	9.27E-04	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	1.00E-03	1.64E-03	3.09E-03	1.56E-03	<LLD	<LLD	<LLD	<LLD
3. Particulates									
Sr-89	Ci	1.75E-03	8.94E-04	1.22E-03	6.51E-03	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	1.39E-05	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	5.80E-05	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	2.05E-03	1.31E-03	2.46E-03	4.71E-03	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	9.77E-04	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	5.78E-04	5.57E-04	1.10E-03	7.82E-04	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	1.24E-03	1.50E-03	1.84E-03	8.34E-04	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	2.04E-03	2.22E-03	3.12E-03	1.38E-03	<LLD	<LLD	<LLD	<LLD
Ni-63	Ci	<LLD	<LLD	2.85E-04	5.77E-04	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	1.88E-04	2.03E-04	3.38E-04	1.24E-04	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-55	Ci	<LLD	<LLD	2.99E-04	6.04E-04	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	6.07E-04	7.60E-04	1.00E-03	3.09E-04	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	8.45E-03	7.44E-03	1.26E-02	1.59E-02	<LLD	<LLD	<LLD	<LLD
4. Tritium									
H-3	Ci	1.05E+01	1.02E+01	8.67E+00	9.88E+00	<LLD	<LLD	<LLD	<LLD
5. Gross Alpha									
Gross Alpha	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
6. Carbon-14									
C-14	Ci	2.42E+00	2.42E+00	2.45E+00	2.45E+00	<LLD	<LLD	<LLD	<LLD

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table A-3: Gaseous Effluent Release Point: Ground Level Releases

Period: January 1, 2012 through December 31, 2012

Unit: Oyster Creek

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1. Fission gases									
Kr- 85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr- 85m	Ci	<LLD	<LLD	1.87E-02	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	1.01E-02	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	9.26E-01	5.33E-02	<LLD	<LLD	<LLD	<LLD
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	<LLD	<LLD	9.55E-01	5.33E-02	<LLD	<LLD	<LLD	<LLD
2. Iodines									
I-131	Ci	1.24E-07	1.58E-07	2.84E-07	8.12E-06	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	1.24E-07	1.58E-07	2.84E-07	8.12E-06	<LLD	<LLD	<LLD	<LLD
3. Particulates									
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	5.04E-07	1.17E-06	3.63E-06	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	1.65E-07	2.92E-07	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	1.06E-06	5.63E-06	6.81E-06	1.12E-05	<LLD	<LLD	<LLD	<LLD
Ni-63	Ci	<LLD	<LLD	2.75E-05	4.15E-05	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-55	Ci	6.96E-03	6.97E-03	4.61E-03	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Am-241	Ci	<LLD	<LLD	<LLD	4.94E-06	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	6.96E-03	6.98E-03	4.65E-03	6.16E-05	<LLD	<LLD	<LLD	<LLD
4. Tritium									
H-3	Ci	1.87E-01	3.62E-01	6.00E-01	4.75E-01	<LLD	<LLD	<LLD	<LLD
5. Gross Alpha									
Gross Alpha	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
6. Carbon-14									
C-14	Ci	7.48E-02	7.41E-02	7.57E-02	7.57E-02	<LLD	<LLD	<LLD	<LLD

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Table A-4: Liquid Effluents - Summary Of All Releases

Period: January 1, 2012 through December 31, 2012

Unit: Oyster Creek

A. Fission & Activation Products	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release not including tritium, gases, alpha	Ci	<LLD	<LLD	<LLD	<LLD	25.00%
2. Average Diluted concentration during period	µCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Total Body Dose	mrem	5.30E-07	2.87E-07	5.37E-07	2.00E-07	
4. Organ Dose	mrem	5.30E-07	2.87E-07	5.37E-07	2.00E-07	
3. Percent of ODCM Limit						
-Total Body Dose	%	3.53E-05	1.91E-05	3.58E-05	1.33E-05	
-Organ Dose	%	1.06E-05	5.74E-06	1.07E-05	4.00E-06	
B. Tritium						
	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release	Ci	1.14E-01	6.12E-02	1.13E-01	4.27E-02	25.00%
2. Average diluted concentration during period	µCi/ml	2.42E-10	2.08E-10	2.74E-10	2.00E-10	
3. Percent of 10CFR20 limit	%	2.42E-05	2.08E-05	2.74E-05	2.00E-05	
C. Dissolved and Entrained Gases						
	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	25.00%
2. Average diluted concentration	µCi/ml	<LLD	<LLD	<LLD	<LLD	
3. Percent of ODCM limit	%	<LLD	<LLD	<LLD	<LLD	
D. Gross Alpha Activity						
	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Est. Total Error %
1. Total Release	Ci	<LLD	<LLD	<LLD	<LLD	25.00%
E. Volume of Waste Released prior to dilution						
	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	
	Liters	3.17E+07	1.69E+07	3.04E+07	1.53E+07	
F. Volume of Dilution Water Used During Period						
	Units	Quarter 1	Quarter 2	Quarter 3	Quarter 4	
	Liters	4.72E+11	2.94E+11	4.12E+11	2.14E+11	

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table A-5: Liquid Release Point: Groundwater Remediation

Period: January 1, 2012 through December 31, 2012

Unit: Oyster Creek

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Nb-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period		<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Dissolved Entrained Gases									
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tritium									
H-3	Ci	1.14E-01	6.12E-02	1.13E-01	4.27E-02	<LLD	<LLD	<LLD	<LLD
Gross Alpha									
Gross Alpha	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Appendix B Solid Waste and Irradiated Fuel Shipments

Oyster Creek 2012 Annual Radioactive Effluent Release Report

A. Solid waste shipped offsite for burial or disposal (not irradiated fuel)

1. Type of waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error%
a. Spent resins, filter sludges, evaporator bottom, etc	7.09E+01	4.09E+02	2012	2.50E+01
b. Dry compressible waste, contaminated equip, etc	9.39E+02	4.77E-01	2012	2.50E+01
c. Irradiated components, control rods, etc	0.00E+00	0.00E+00	2012	2.50E+01
d. Other	2.15E+02	4.04E+00	2012	2.50E+01

Oyster Creek 2012 Annual Radioactive Effluent Release Report

1. Estimate of Major Nuclide Composition (By Waste Type)

Category A – Spent Resin, Filters, Sludges, Evaporator Bottoms, etc.

Isotope	Waste Class A		Waste Class B	
	Curies	Percent	Curies	Percent
H-3	4.86E-02	5.64E-02	4.06E-02	1.26E-02
C-14	1.50E-01	1.74E-01	2.47E-02	7.64E-03
Cr-51				
Mn-54	6.80E+00	7.90E+00	9.06E+00	2.80E+00
Fe-55	5.36E+01	6.23E+01	2.26E+02	6.99E+01
Fe-59			4.91E-02	1.52E-02
Co-57	2.97E-04	3.45E-04	1.86E-03	5.76E-04
Co-58	2.62E-02	3.04E-02	7.18E-02	2.22E-02
Co-60	2.20E+01	2.56E+01	5.11E+01	1.58E+01
Ni-59			3.21E-03	9.93E-04
Ni-63	1.05E+00	1.22E+00	2.62E+00	8.11E-01
Zn-65	1.15E+00	1.34E+00	1.74E+00	5.38E-01
Sr-89	1.92E-03	2.23E-03	4.50E-06	1.39E-06
Sr-90	6.19E-03	7.19E-03	1.52E-01	4.70E-02
Nb-95			7.14E-03	2.21E-03
Tc-99	9.09E-03	1.06E-02		
Ag-110m				
Sb-125	9.32E-03	1.08E-02		
Cs-134	2.33E-04	2.71E-04	1.12E+00	3.47E-01
Cs-137	1.12E+00	1.30E+00	3.09E+01	9.56E+00
Ce-144	1.01E-01	1.17E-01	1.37E-01	4.24E-02
Pu-238	4.15E-04	4.82E-04	2.84E-03	8.79E-04
Pu-239	1.13E-04	1.31E-04	9.01E-04	2.79E-04
Pu-240				
Pu-241	2.54E-02	2.95E-02	8.33E-02	2.58E-02
Am-241	4.17E-04	4.84E-04	4.15E-03	1.28E-03
Cm-242	6.97E-05	8.10E-05	1.29E-03	3.99E-04
Cm-243	2.83E-04	3.29E-04	2.05E-03	6.34E-04
Cm-244	2.80E-04	3.25E-04	1.57E-03	4.86E-04
Totals	8.61E+01	1.00E+02	3.23E+02	1.00E+02

Note: Grey fields are where results were not reported in the NRC Regulatory Guide 1.21 Report

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Category B – Dry Compressible Waste, Contaminated Equipment, etc.

Isotope	Waste Class A	
	Curies	Percent
H-3	4.68E-04	9.82E-02
C-14	3.61E-04	7.58E-02
Mn-54	6.38E-02	1.34E+01
Fe-55	2.91E-01	6.11E+01
Co-57	1.04E-05	2.18E-03
Co-58	5.80E-04	1.22E-01
Co-60	1.02E-01	2.14E+01
Ni-63	5.45E-03	1.14E+00
Zn-65	6.87E-03	1.44E+00
Sr-89	1.88E-06	3.95E-04
Sr-90	6.19E-06	1.30E-03
Tc-99	1.96E-04	4.11E-02
Sb-125	1.17E-03	2.46E-01
Cs-137	3.55E-03	7.45E-01
Ce-144	8.78E-04	1.84E-01
Pu-238	5.15E-06	1.08E-03
Pu-239	1.35E-06	2.83E-04
Pu-241	1.76E-04	3.69E-02
Am-241	5.86E-06	1.23E-03
Cm-242	2.35E-06	4.93E-04
Cm-243	4.31E-06	9.04E-04
Cm-244	4.31E-06	9.04E-04
Totals	4.77E-01	1.00E+02

Category C – Irradiated components, control rods, etc.

No Irradiated components, control rods, etc. shipped

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Category D - Other - Scrap Metal

Isotope	Waste Class A	
	Curies	Percent
H-3	2.09E+00	5.17E+01
C-14	8.49E-05	2.10E-03
Mn-54	3.92E-01	9.70E+00
Fe-55	2.02E-01	5.00E+00
C0-57	4.43E-05	1.10E-03
Co-58	5.54E-02	1.37E+00
Co-60	8.94E-01	2.21E+01
Ni-63	1.95E-02	4.83E-01
Zn-65	1.73E-01	4.28E+00
Sr-89	3.13E-03	7.75E-02
Sr-90	2.41E-03	5.97E-02
Tc-99	8.31E-06	2.06E-04
Sb-125	4.90E-05	1.21E-03
Cs-137	1.96E-01	4.85E+00
Ce-144	1.20E-02	2.97E-01
Pu-238	5.39E-07	1.33E-05
Pu-239	1.48E-07	3.66E-06
Pu-241	2.57E-04	6.36E-03
Am-241	1.31E-06	3.24E-05
Cm-242	8.10E-07	2.01E-05
Cm-243	1.82E-07	4.51E-06
Cm-244	1.82E-07	4.51E-06
Totals	4.04E+00	1.00E+02

Note: Grey fields are where results were not reported in the NRC Regulatory Guide 1.21 Report

2. Solid Waste (Disposition)

Number of Shipments	Mode of Transportation	Destination
13	Hittman Transport Co.	Barnwell Disposal Facility
19	Hittman Transport Co.	Duratek - Bear Creek
11	Hittman Transport Co.	Duratek Radwaste Processing, Inc.

B. Irradiated Fuel Shipments (disposition).

There were no irradiated fuel shipments

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C. Changes to the Process Control Program

Submitted with this report is Revision 8 of RW-AA-100, Process Control Program for Radioactive Wastes. All changes made to the document are denoted by "Revision Bars" in the right hand margin. The following is a summary of the changes made in Revision 8:

- Step 4.1.8 was added to allow an Exelon Nuclear plant to store waste from another Exelon Nuclear plant provided formal NRC approval is granted for the transfer of waste. The addition of this procedural step for the transfer and storage of radioactive waste at an Exelon Nuclear plant from another Exelon Nuclear plant to the Process Control Program ensures that if the storage of waste from another site is implemented, that a formal NRC review and approval process for the storage of waste from another site will address the site specific effects on the UFSAR and regulatory bases.
- Step 4.2.8 was modified to add "in the pool or loading the processed activated hardware into the Dry Cask storage system." to further clarify the storage of activated hardware. The additional wording has been added to clarify the storage of activated hardware are generic and remain consistent with the UFSAR description of the Spent fuel Pool and Dry Cask Storage Systems.
- Step 4.4.4. was added to state that, "Shipments sent for offsite storage SHALL meet the storage site's waste acceptance criteria." The addition of this procedural step for the transfer and storage of radioactive waste at an Exelon Nuclear plant from another Exelon Nuclear plant to the Process Control Program ensures that if the storage of waste from another site is implemented, that a formal NRC review and approval process for the storage of waste from another site will address the site specific effects on the UFSAR and regulatory bases.
- Numerous minor wording and editorial changes were made throughout the document to correct grammatical errors and to improve document readability.

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Appendix C Radiological Impact to Man

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Per ODCM Administrative Control 6.2, an assessment of radiation doses to the likely most exposed MEMBER OF THE PUBLIC from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous calendar year must be made to show conformance with 40 CFR Part 190, Environmental Radiation Protection Standards for Nuclear Power Operation. For purposes of this calculation the following assumptions were made:

Gaseous

- Nearest member of the public was W sector at 483 meters
- Actual 2012 meteorology and measured gaseous effluent releases were used
- All significant pathways were assumed to be present
- Occupancy factor was considered 22.8% (40 hours/week for 50 weeks).

Liquid

- Doses calculated in the discharge canal at the Route 9 bridge
- Fish, shellfish and shoreline pathways doses calculated

40 CFR Part 190 Compliance

- Dosimetry measurements (minus average of control stations) measured direct radiation for the nearest member of the public. The nearest member of the public for direct radiation is considered an individual that works in the warehouse west of the site. As a worker, the individual is assumed to work 2,000 hours per year at this location.
- Nearest resident was at SE sector at 937 meters.
- The highest calculated dose for gamma air dose and liquid total body were summed for total body dose.
- The highest calculated dose for gamma air dose, child bone and liquid organ were summed for organ dose.
- The limits for Kr-85, I-129, Pu-239 and other alpha-emitting transuranic radionuclides with half-lives greater than one year were not exceeded.

The ODCM does not require total body doses to the population and average doses to individuals in the population from gaseous effluents to a distance of 50 miles from the site to be calculated.

Oyster Creek 2012 Annual Radioactive Effluent Release Report

A summary of gaseous and liquid radiation doses to most likely exposed MEMBER OF THE PUBLIC was as follows:

Effluent	Applicable Organ	Estimated Dose	Age Group	Location		% of Applicable Limit	Limit	Unit
				Distance (meters)	Direction (toward)			
Noble Gas	Gamma - Air Dose	7.11E-03	All	522	SE	7.11E-02	10	mrad
Noble Gas	Beta - Air Dose	5.79E-03	All	405	E	2.90E-02	20	mrad
Noble Gas	Total Body (Gamma)	2.34E-03	All	937	SE	4.68E-02	5	mrem
Noble Gas	Skin (Beta)	3.46E-03	All	937	SE	2.31E-02	15	mrem
Iodine, Particulate, Carbon-14 & Tritium	Bone	5.60E-01	Child	937	SE	3.73E+00	15	mrem
Liquid	Total body	1.55E-06	All	South Route 9 Bridge		5.18E-05	3	mrem
Liquid	Organ	1.55E-06	All			1.55E-05	10	mrem
Direct Radiation	Total Body	5.55E+00	All	483	W	2.22E+01	25	mrem
Direct Radiation	Total Body	<LLD	All	937	SE	<LLD	25	mrem
40 CFR Part 190 Compliance								
Warehouse Worker								
Total Dose	Total Body	5.55E+00	All	483	W	2.22E+01	25	mrem
Total Dose	Bone	5.68E+00	All	483	W	2.27E+01	25	mrem
Total Dose	Thyroid	5.55E+00	All	483	W	7.40E+00	75	mrem
Nearest Resident								
Total Dose	Total Body	7.11E-03	All	937	SE	2.84E-02	25	mrem
Total Dose	Bone	5.67E-01	All	937	SE	2.27E+00	25	mrem
Total Dose	Thyroid	7.11E-03	All	937	SE	9.48E-03	75	mrem

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Appendix D Meteorological Data

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Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Extremely Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	7	2	0	0	0	10
NNE	1	7	0	0	0	0	8
NE	1	14	5	0	0	0	20
ENE	1	13	19	0	0	0	33
E	1	9	1	0	0	0	11
ESE	0	17	7	0	0	0	24
SE	1	6	15	0	0	0	22
SSE	0	3	5	2	0	0	10
S	1	2	26	9	0	0	38
SSW	1	2	10	3	0	0	16
SW	1	6	26	5	0	0	38
WSW	0	3	25	4	0	0	32
W	1	11	37	18	0	0	67
WNW	1	11	33	8	0	0	53
NW	1	19	55	20	0	0	95
NNW	0	7	20	5	0	0	32
Variable	0	0	0	0	0	0	0
Total	12	137	286	74	0	0	509

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
Stability Class - Moderately Unstable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	4	2	0	0	0	7
NNE	0	4	0	0	0	0	4
NE	1	6	0	0	0	0	7
ENE	0	4	5	0	0	0	9
E	1	0	0	0	0	0	1
ESE	0	4	0	0	0	0	4
SE	1	3	2	0	0	0	6
SSE	1	0	2	0	0	0	3
S	0	0	6	1	0	0	7
SSW	1	0	2	2	0	0	5
SW	0	0	2	0	0	0	2
WSW	1	2	3	1	0	0	7
W	1	2	6	3	0	0	12
WNW	0	3	4	0	0	0	7
NW	0	2	7	0	0	0	9
NNW	0	5	1	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	8	39	42	7	0	0	96

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Slightly Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	1	0	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	2	1	0	0	0	3
ENE	0	0	1	0	0	0	1
E	1	1	0	0	0	0	2
ESE	0	4	0	0	0	0	4
SE	0	1	1	0	0	0	2
SSE	0	1	0	0	0	0	1
S	0	1	0	0	0	0	1
SSW	0	0	2	0	0	0	2
SW	0	0	1	0	0	0	1
WSW	0	1	2	0	0	0	3
W	1	2	0	1	0	0	4
WNW	0	2	1	0	0	0	3
NW	0	4	3	0	0	0	7
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	3	21	12	1	0	0	37

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Neutral - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	9	14	12	0	0	0	35
NNE	5	19	6	0	0	0	30
NE	7	17	16	0	0	0	40
ENE	7	17	19	0	0	0	43
E	5	14	9	1	0	0	29
ESE	1	8	3	1	0	0	13
SE	1	5	4	0	0	0	10
SSE	5	9	8	0	0	0	22
S	5	5	19	1	0	0	30
SSW	3	12	29	8	0	0	52
SW	4	16	18	0	0	0	38
WSW	5	15	3	1	0	0	24
W	7	17	14	8	0	0	46
WNW	7	20	13	8	0	0	48
NW	3	24	24	3	0	0	54
NNW	9	10	6	0	0	0	25
Variable	0	0	0	0	0	0	0
Total	83	222	203	31	0	0	539

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
Stability Class - Slightly Stable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	8	5	0	0	0	0	13
NNE	6	6	0	0	0	0	12
NE	13	13	2	0	0	0	28
ENE	8	9	7	0	0	0	24
E	4	1	0	3	0	0	8
ESE	2	1	4	0	0	0	7
SE	1	0	2	0	0	0	3
SSE	4	6	4	0	0	0	14
S	3	12	12	3	0	0	30
SSW	3	32	33	4	0	0	72
SW	7	52	20	5	0	0	84
WSW	7	51	9	1	0	0	68
W	9	27	17	1	0	0	54
WNW	12	40	14	2	0	0	68
NW	16	31	4	0	0	0	51
NNW	2	12	4	0	0	0	18
Variable	0	0	0	0	0	0	0
Total	105	298	132	19	0	0	554

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Moderately Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	1	0	0	0	0	3
NNE	1	0	0	0	0	0	1
NE	1	2	0	0	0	0	3
ENE	1	0	0	0	0	0	1
E	1	0	0	0	0	0	1
ESE	1	0	0	0	0	0	1
SE	1	0	0	0	0	0	1
SSE	2	2	0	0	0	0	4
S	2	0	0	0	0	0	2
SSW	4	5	0	0	0	0	9
SW	10	14	0	0	0	0	24
WSW	6	32	0	0	0	0	38
W	9	17	1	0	0	0	27
WNW	15	11	0	0	0	0	26
NW	5	16	0	0	0	0	21
NNW	4	2	0	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	65	102	1	0	0	0	168

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 1 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Extremely Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	0	0	0	0	0	3
NNE	1	0	0	0	0	0	1
NE	2	0	0	0	0	0	2
ENE	1	0	0	0	0	0	1
E	1	1	0	0	0	0	2
ESE	0	0	0	0	0	0	0
SE	1	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	2	1	0	0	0	0	3
SSW	8	2	0	0	0	0	10
SW	8	6	0	0	0	0	14
WSW	53	34	0	0	0	0	87
W	58	14	0	0	0	0	72
WNW	35	8	0	0	0	0	43
NW	23	6	0	0	0	0	29
NNW	5	1	0	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	201	73	0	0	0	0	274

Hours of calm in this stability class: 1
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
Stability Class - Extremely Unstable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	2	0	0	0	2
ENE	0	0	1	3	0	0	4
E	0	0	2	0	1	0	3
ESE	0	0	0	0	0	0	0
SE	0	0	3	1	0	0	4
SSE	0	0	1	3	0	0	4
S	0	0	0	0	1	0	1
SSW	0	0	1	1	1	0	3
SW	0	0	0	2	2	0	4
WSW	0	0	2	8	4	0	14
W	0	0	0	2	4	1	7
WNW	0	1	1	6	3	0	11
NW	0	0	3	13	8	2	26
NNW	0	0	2	9	3	7	21
Variable	0	0	0	0	0	0	0
Total	0	1	18	48	27	10	104

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Moderately Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	0	3	0	0	0	3
ENE	0	0	1	3	0	0	4
E	0	0	2	0	0	0	2
ESE	0	0	1	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	0	2	1	0	0	3
S	0	0	3	4	0	0	7
SSW	0	1	3	9	2	2	17
SW	0	0	0	2	0	1	3
WSW	0	0	2	2	0	0	4
W	0	0	2	7	4	2	15
WNW	0	0	3	8	3	5	19
NW	0	0	8	14	1	3	26
NNW	0	0	3	2	6	2	13
Variable	0	0	0	0	0	0	0
Total	0	1	35	52	16	15	119

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Slightly Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	1	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	0	9	1	0	0	10
ENE	0	0	4	4	0	0	8
E	0	1	2	3	1	0	7
ESE	0	0	1	0	0	0	1
SE	0	2	4	1	0	0	7
SSE	0	0	3	0	1	0	4
S	0	0	3	5	0	0	8
SSW	0	0	1	11	1	0	13
SW	0	0	0	1	1	2	4
WSW	0	0	0	6	3	0	9
W	0	0	2	11	6	4	23
WNW	0	0	4	10	6	7	27
NW	0	2	7	6	5	7	27
NNW	0	2	2	2	2	2	10
Variable	0	0	0	0	0	0	0
Total	0	8	42	62	26	22	160

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
Stability Class - Neutral - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	18	19	3	0	44
NNE	1	6	13	8	2	0	30
NE	0	6	23	33	5	1	68
ENE	2	7	5	30	13	4	61
E	0	3	8	1	11	0	23
ESE	1	10	11	5	3	0	30
SE	0	7	8	7	5	1	28
SSE	1	3	9	6	2	0	21
S	1	9	4	6	4	0	24
SSW	0	6	3	25	14	10	58
SW	2	2	0	24	22	5	55
WSW	0	2	11	20	13	4	50
W	3	7	6	26	14	10	66
WNW	1	4	6	17	20	24	72
NW	2	4	11	25	19	10	71
NNW	0	0	11	12	21	8	52
Variable	0	0	0	0	0	0	0
Total	14	80	147	264	171	77	753

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Slightly Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	1	8	2	4	0	16
NNE	0	4	6	2	0	0	12
NE	2	6	7	7	0	0	22
ENE	0	1	6	7	1	1	16
E	0	3	5	7	3	8	26
ESE	1	13	3	3	3	1	24
SE	1	8	4	5	1	0	19
SSE	1	2	3	4	2	0	12
S	1	1	5	6	10	1	24
SSW	1	1	5	11	30	9	57
SW	1	5	2	18	48	13	87
WSW	1	3	3	14	43	6	70
W	2	4	4	21	36	5	72
WNW	1	0	7	17	21	2	48
NW	1	1	5	27	20	0	54
NNW	2	2	6	25	27	0	62
Variable	0	0	0	0	0	0	0
Total	16	55	79	176	249	46	621

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Moderately Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	0	2	13	3	0	19
NNE	0	1	3	1	2	0	7
NE	0	1	1	2	0	0	4
ENE	0	0	1	0	0	0	1
E	1	0	1	2	0	0	4
ESE	0	0	0	0	0	0	0
SE	1	1	2	0	0	0	4
SSE	0	2	1	1	0	0	4
S	0	0	3	8	1	0	12
SSW	1	1	1	8	5	0	16
SW	1	2	2	6	8	4	23
WSW	0	1	1	5	9	12	28
W	0	0	5	10	13	1	29
WNW	0	3	4	12	11	3	33
NW	0	0	8	10	21	3	42
NNW	0	1	3	20	11	3	38
Variable	0	0	0	0	0	0	0
Total	5	13	38	98	84	26	264

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 2 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – March, 2012

Oyster Creek Alpha

Period of Record: January - March 2012
 Stability Class - Extremely Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	2	6	2	0	12
NNE	0	3	1	1	0	0	5
NE	0	1	2	1	0	0	4
ENE	0	1	4	0	0	0	5
E	0	1	2	0	0	0	3
ESE	0	0	3	0	0	0	3
SE	0	0	0	1	0	0	1
SSE	0	0	2	0	0	0	2
S	0	0	2	5	0	0	7
SSW	0	0	1	4	0	0	5
SW	0	1	2	6	3	0	12
WSW	1	0	5	5	4	1	16
W	0	3	7	3	3	3	19
WNW	0	0	9	8	10	2	29
NW	0	1	7	4	7	0	19
NNW	1	0	4	7	3	0	15
Variable	0	0	0	0	0	0	0
Total	2	13	53	51	32	6	157

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
Stability Class - Extremely Unstable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	10	2	0	0	0	12
NNE	1	8	6	0	0	0	15
NE	0	14	27	0	0	0	41
ENE	0	24	43	0	0	0	67
E	3	19	16	0	0	0	38
ESE	2	19	13	0	0	0	34
SE	2	22	47	0	0	0	71
SSE	1	10	29	2	0	0	42
S	2	6	38	21	2	0	69
SSW	0	8	5	1	0	0	14
SW	0	9	14	1	0	0	24
WSW	1	17	15	1	0	0	34
W	1	18	26	13	2	0	60
WNW	1	9	64	11	0	0	85
NW	1	20	43	5	0	0	69
NNW	0	14	18	3	0	0	35
Variable	0	0	0	0	0	0	0
Total	15	227	406	58	4	0	710

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 4
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
Stability Class - Moderately Unstable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	0	0	0	0	2
NNE	0	1	0	0	0	0	1
NE	1	8	1	0	0	0	10
ENE	0	5	3	0	0	0	8
E	0	3	1	0	0	0	4
ESE	0	1	1	0	0	0	2
SE	0	6	1	0	0	0	7
SSE	0	0	5	2	0	0	7
S	1	1	5	0	0	0	7
SSW	3	3	0	1	0	0	7
SW	0	2	1	0	0	0	3
WSW	0	3	1	0	0	0	4
W	0	5	0	1	0	0	6
WNW	0	10	4	0	0	0	14
NW	0	3	2	0	0	0	5
NNW	0	2	0	0	0	0	2
Variable	0	0	0	0	0	0	0
Total	5	55	25	4	0	0	89

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha							
Period of Record: April - June 2012							
Stability Class - Slightly Unstable - 150Ft-33Ft Delta-T (F)							
Winds Measured at 33 Feet							
Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	0	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	2	3	0	0	0	0	5
ENE	0	6	3	0	0	0	9
E	0	2	1	0	0	0	3
ESE	0	0	0	0	0	0	0
SE	0	4	2	0	0	0	6
SSE	0	5	1	0	0	0	6
S	0	2	3	0	0	0	5
SSW	1	2	0	0	0	0	3
SW	0	2	3	0	0	0	5
WSW	0	0	0	0	0	0	0
W	1	0	0	0	0	0	1
WNW	1	2	2	0	0	0	5
NW	2	0	2	0	0	0	4
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	7	30	17	0	0	0	54

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
Stability Class - Neutral - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	11	4	0	0	0	16
NNE	1	14	7	0	0	0	22
NE	7	30	4	0	0	0	41
ENE	2	20	3	0	0	0	25
E	6	15	5	0	0	0	26
ESE	1	18	5	0	0	0	24
SE	5	15	9	1	0	0	30
SSE	6	21	30	2	0	0	59
S	4	14	22	2	0	0	42
SSW	4	20	19	1	0	0	44
SW	4	13	8	0	0	0	25
WSW	3	12	1	0	0	0	16
W	4	6	3	0	0	0	13
WNW	1	14	5	0	0	0	20
NW	2	17	9	0	0	0	28
NNW	2	10	2	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	53	250	136	6	0	0	445

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 2
Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012

Stability Class - Slightly Stable - 150Ft-33Ft Delta-T (F)

Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	4	2	0	0	0	7
NNE	3	2	3	1	0	0	9
NE	7	12	2	0	0	0	21
ENE	2	11	1	0	0	0	14
E	1	8	0	0	0	0	9
ESE	2	2	2	0	0	0	6
SE	3	3	2	0	0	0	8
SSE	9	4	7	0	0	0	20
S	7	11	2	1	0	0	21
SSW	14	36	2	0	0	0	52
SW	10	49	1	0	0	0	60
WSW	10	40	2	0	0	0	52
W	12	21	2	0	0	0	35
WNW	4	26	3	1	0	0	34
NW	5	21	5	0	0	0	31
NNW	3	7	4	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	93	257	40	3	0	0	393

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 1

Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
 Stability Class - Moderately Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	3	0	0	0	0	4
NNE	0	1	0	0	0	0	1
NE	3	1	0	0	0	0	4
ENE	1	2	0	0	0	0	3
E	0	0	0	0	0	0	0
ESE	1	0	1	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	2	0	0	0	0	0	2
S	3	1	0	0	0	0	4
SSW	2	3	0	0	0	0	5
SW	8	7	0	0	0	0	15
WSW	12	35	0	0	0	0	47
W	19	8	1	0	0	0	28
WNW	6	17	0	0	0	0	23
NW	4	11	0	0	0	0	15
NNW	3	3	0	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	65	92	2	0	0	0	159

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 3 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
 Stability Class - Extremely Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	0	0	0	0	0	4
NNE	0	0	0	0	0	0	0
NE	2	0	0	0	0	0	2
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	1	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	1	0	0	0	0	0	1
SSW	3	0	0	0	0	0	3
SW	7	3	0	0	0	0	10
WSW	43	25	0	0	0	0	68
W	63	11	0	0	0	0	74
WNW	22	5	0	0	0	0	27
NW	23	18	0	0	0	0	41
NNW	12	6	0	0	0	0	18
Variable	0	0	0	0	0	0	0
Total	181	68	0	0	0	0	249

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
 Stability Class - Extremely Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	3	0	0	4
NNE	0	0	5	0	0	0	5
NE	0	0	3	8	4	0	15
ENE	0	0	7	18	2	0	27
E	0	0	11	6	0	0	17
ESE	0	0	6	0	0	0	6
SE	0	0	10	3	0	0	13
SSE	0	0	7	8	0	0	15
S	0	1	3	5	3	1	13
SSW	0	1	3	2	2	0	8
SW	0	2	1	2	1	0	6
WSW	0	3	1	6	5	0	15
W	0	1	5	9	2	2	19
WNW	0	0	3	20	12	9	44
NW	0	0	4	14	18	2	38
NNW	0	0	6	9	6	0	21
Variable	0	0	0	0	0	0	0
Total	0	8	76	113	55	14	266

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 2
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012

Stability Class - Moderately Unstable - 380Ft-33Ft Delta-T (F)

Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	4	0	0	0	6
NNE	0	1	1	0	0	0	2
NE	0	0	2	5	0	0	7
ENE	0	2	4	3	1	0	10
E	0	3	5	0	1	0	9
ESE	0	2	2	2	0	0	6
SE	0	2	7	1	0	0	10
SSE	0	0	7	6	0	0	13
S	0	1	1	8	1	1	12
SSW	0	0	1	2	4	4	11
SW	0	1	1	0	1	0	3
WSW	0	0	1	5	2	0	8
W	0	0	7	3	2	2	14
WNW	0	1	3	7	3	3	17
NW	0	2	3	5	8	1	19
NNW	0	2	2	6	3	1	14
Variable	0	0	0	0	0	0	0
Total	0	19	51	53	26	12	161

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012

Stability Class - Slightly Unstable - 380Ft-33Ft Delta-T (F)

Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	1	0	0	3
NNE	0	0	2	0	0	0	2
NE	0	1	4	3	0	0	8
ENE	0	1	7	5	0	0	13
E	0	5	2	3	0	0	10
ESE	0	0	2	0	0	0	2
SE	0	1	6	7	0	0	14
SSE	0	1	7	2	0	0	10
S	0	0	6	8	1	0	15
SSW	0	1	1	7	3	0	12
SW	1	0	2	0	2	0	5
WSW	0	2	1	1	0	0	4
W	0	1	7	0	2	0	10
WNW	0	2	1	8	1	1	13
NW	0	2	4	6	5	1	18
NNW	0	1	3	1	1	0	6
Variable	0	0	0	0	0	0	0
Total	1	18	57	52	15	2	145

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 1

Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha							
Period of Record: April - June 2012							
Stability Class - Neutral - 380Ft-33Ft Delta-T (F)							
Winds Measured at 380 Feet							
Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	6	9	4	0	20
NNE	0	1	14	11	0	0	26
NE	0	2	24	20	3	1	50
ENE	0	5	33	41	4	0	83
E	1	7	15	10	3	0	36
ESE	0	12	12	9	1	1	35
SE	2	21	13	16	1	1	54
SSE	3	12	24	30	21	1	91
S	3	5	21	30	6	1	66
SSW	1	5	12	33	16	2	69
SW	0	5	11	21	9	0	46
WSW	0	3	8	16	2	1	30
W	2	3	8	8	4	1	26
WNW	1	4	9	12	3	5	34
NW	1	3	9	30	13	1	57
NNW	1	0	7	7	5	1	21
Variable	0	0	0	0	0	0	0
Total	15	89	226	303	95	16	744

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 2
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012

Stability Class - Slightly Stable - 380Ft-33Ft Delta-T (F)

Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	7	9	1	0	17
NNE	0	1	3	5	0	0	9
NE	1	0	0	0	0	1	2
ENE	0	0	4	5	0	1	10
E	0	3	4	9	0	0	16
ESE	1	5	3	0	0	0	9
SE	1	3	0	0	0	0	4
SSE	0	10	4	2	0	0	16
S	0	5	3	1	0	0	9
SSW	0	6	5	17	3	0	31
SW	2	5	13	37	16	1	74
WSW	2	1	4	30	15	1	53
W	3	2	6	15	12	0	38
WNW	0	1	6	12	6	1	26
NW	0	2	3	13	16	3	37
NNW	0	2	3	2	18	1	26
Variable	0	0	0	0	0	0	0
Total	10	46	68	157	87	9	377

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 1

Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012

Stability Class - Moderately Stable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	12	7	0	22
NNE	0	0	3	3	0	0	6
NE	0	1	2	5	0	0	8
ENE	0	2	4	0	1	0	7
E	1	3	0	0	0	0	4
ESE	0	2	0	0	0	0	2
SE	0	3	0	0	0	0	3
SSE	0	0	2	0	0	0	2
S	0	0	1	1	0	0	2
SSW	0	1	0	3	0	0	4
SW	2	2	2	7	7	1	21
WSW	1	0	1	9	13	8	32
W	0	1	2	10	16	6	35
WNW	0	2	5	8	12	3	30
NW	0	2	1	7	8	11	29
NNW	0	2	3	7	12	4	28
Variable	0	0	0	0	0	0	0
Total	4	21	29	72	76	33	235

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 4 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, April – June, 2012

Oyster Creek Alpha

Period of Record: April - June 2012
Stability Class - Extremely Stable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	3	6	0	0	10
NNE	0	2	2	2	2	0	8
NE	1	3	11	4	0	0	19
ENE	0	1	0	3	0	0	4
E	0	1	0	0	0	0	1
ESE	0	0	1	0	0	0	1
SE	0	5	2	1	0	0	8
SSE	1	3	1	1	0	0	6
S	0	2	2	0	0	0	4
SSW	0	5	1	0	0	0	6
SW	0	3	2	0	0	0	5
WSW	0	0	5	1	2	5	13
W	0	1	3	2	9	2	17
WNW	0	1	2	7	13	4	27
NW	0	2	1	7	16	2	28
NNW	0	2	1	6	5	0	14
Variable	0	0	0	0	0	0	0
Total	2	32	37	40	47	13	171

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 78

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Extremely Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	4	1	0	0	0	6
NNE	1	9	0	0	0	0	10
NE	1	4	4	0	0	0	9
ENE	1	26	9	0	0	0	36
E	3	13	8	0	0	0	24
ESE	0	19	7	0	0	0	26
SE	0	28	39	0	0	0	67
SSE	2	7	15	0	0	0	24
S	1	14	35	9	0	0	59
SSW	1	5	23	5	0	0	34
SW	0	20	33	0	0	0	53
WSW	1	16	2	0	0	0	19
W	1	25	13	0	0	0	39
WNW	0	22	7	0	0	0	29
NW	0	27	17	0	0	0	44
NNW	0	5	8	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	13	244	221	14	0	0	492

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Moderately Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	2	0	0	0	0	4
NNE	2	2	0	0	0	0	4
NE	2	4	3	0	0	0	9
ENE	0	4	6	0	0	0	10
E	0	7	0	0	0	0	7
ESE	0	3	0	0	0	0	3
SE	0	8	1	0	0	0	9
SSE	0	8	2	0	0	0	10
S	0	3	5	1	1	0	10
SSW	0	2	4	0	0	0	6
SW	0	3	6	0	0	0	9
WSW	2	7	1	0	0	0	10
W	0	2	1	0	0	0	3
WNW	4	4	1	0	0	0	9
NW	3	12	2	0	0	0	17
NNW	0	5	3	0	0	0	8
Variable	0	0	0	0	0	0	0
Total	15	76	35	1	1	0	128

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Slightly Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	0	0	0	0	3
NNE	0	0	0	0	0	0	0
NE	1	0	0	0	0	0	1
ENE	0	4	0	0	0	0	4
E	0	2	2	0	0	0	4
ESE	0	1	0	0	0	0	1
SE	1	5	0	0	0	0	6
SSE	0	2	4	0	0	0	6
S	0	3	3	2	1	0	9
SSW	0	0	1	0	0	0	1
SW	0	0	2	0	0	0	2
WSW	1	1	0	0	0	0	2
W	0	1	0	0	0	0	1
WNW	0	4	0	0	0	0	4
NW	0	4	0	0	0	0	4
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	4	30	12	2	1	0	49

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the
Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
Stability Class - Neutral - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	2	0	0	0	0	4
NNE	0	1	0	0	0	0	1
NE	1	11	6	0	0	0	18
ENE	0	7	3	1	0	0	11
E	1	8	6	0	0	0	15
ESE	2	5	3	0	0	0	10
SE	1	11	1	0	0	0	13
SSE	2	13	2	2	0	0	19
S	1	12	7	5	1	0	26
SSW	6	11	9	0	0	0	26
SW	2	7	4	0	0	0	13
WSW	1	10	1	0	0	0	12
W	3	5	1	0	0	0	9
WNW	2	13	0	0	0	0	15
NW	2	9	2	0	0	0	13
NNW	5	10	5	0	0	0	20
Variable	0	0	0	0	0	0	0
Total	31	135	50	8	1	0	225

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 1
Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Slightly Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	3	0	0	0	0	7
NNE	2	2	0	0	0	0	4
NE	2	8	9	0	0	0	19
ENE	3	7	6	2	0	0	18
E	5	20	9	0	0	0	34
ESE	2	24	0	0	0	0	26
SE	6	13	0	0	0	0	19
SSE	7	20	4	3	0	0	34
S	10	51	22	3	3	0	89
SSW	17	45	18	0	0	0	80
SW	15	56	1	0	0	0	72
WSW	19	39	2	0	0	0	60
W	14	15	4	0	0	0	33
WNW	11	19	0	0	0	0	30
NW	10	17	2	0	0	0	29
NNW	5	9	1	0	0	0	15
Variable	0	0	0	0	0	0	0
Total	132	348	78	8	3	0	569

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Moderately Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	5	0	0	0	0	0	5
NNE	3	1	0	0	0	0	4
NE	0	0	2	0	0	0	2
ENE	2	2	3	0	0	0	7
E	3	2	0	0	0	0	5
ESE	0	0	0	0	0	0	0
SE	5	0	0	0	0	0	5
SSE	7	2	1	0	0	0	10
S	13	4	0	0	0	0	17
SSW	11	2	1	0	0	0	14
SW	10	9	0	0	0	0	19
WSW	29	20	0	0	0	0	49
W	28	3	0	0	0	0	31
WNW	13	8	0	0	0	0	21
NW	8	11	0	0	0	0	19
NNW	1	1	0	0	0	0	2
Variable	0	0	0	0	0	0	0
Total	138	65	7	0	0	0	210

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 5 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
Stability Class - Extremely Stable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	0	0	0	0	0	3
NNE	2	0	0	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	0	0	1	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	1	0	0	0	0	0	1
S	5	0	0	0	0	0	5
SSW	11	0	0	0	0	0	11
SW	34	5	0	0	0	0	39
WSW	117	10	0	0	0	0	127
W	144	8	0	0	0	0	152
WNW	52	3	0	0	0	0	55
NW	32	9	0	0	0	0	41
NNW	10	5	0	0	0	0	15
Variable	0	0	0	0	0	0	0
Total	411	40	1	0	0	0	452

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 81

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012

Stability Class - Extremely Unstable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	1	0	0	0	1
ENE	0	0	6	1	0	0	7
E	0	0	1	2	0	0	3
ESE	0	0	1	0	0	0	1
SE	0	0	5	0	0	0	5
SSE	0	0	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	3	0	0	3
WSW	0	0	3	1	0	0	4
W	0	0	0	2	0	0	2
WNW	0	0	3	0	0	0	3
NW	0	0	0	2	0	0	2
NNW	0	0	0	5	0	0	5
Variable	0	0	0	0	0	0	0
Total	0	0	21	16	0	0	37

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Moderately Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	4	0	0	0	4
NNE	0	0	1	0	0	0	1
NE	0	1	2	0	0	0	3
ENE	0	0	4	1	0	0	5
E	0	1	4	0	0	0	5
ESE	0	4	7	1	0	0	12
SE	0	2	23	1	0	0	26
SSE	0	2	8	4	0	0	14
S	0	3	4	5	2	0	14
SSW	0	1	2	15	6	1	25
SW	0	3	4	15	0	0	22
WSW	0	1	6	3	0	0	10
W	0	3	10	5	2	0	20
WNW	0	0	7	2	0	0	9
NW	0	1	5	4	0	0	10
NNW	0	1	2	11	0	0	14
Variable	0	0	0	0	0	0	0
Total	0	23	93	67	10	1	194

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Slightly Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	1	0	0	2
NNE	0	4	2	0	0	0	6
NE	0	1	3	0	0	0	4
ENE	1	4	3	6	0	0	14
E	1	4	6	2	0	0	13
ESE	0	1	5	0	0	0	6
SE	0	5	13	1	0	0	19
SSE	0	0	17	3	0	0	20
S	2	1	7	6	0	0	16
SSW	0	3	8	13	3	2	29
SW	0	1	1	8	0	0	10
WSW	0	4	6	4	0	0	14
W	0	0	6	2	1	0	9
WNW	0	2	6	5	0	0	13
NW	0	8	11	4	0	0	23
NNW	0	1	3	4	2	0	10
Variable	0	0	0	0	0	0	0
Total	4	40	97	59	6	2	208

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Neutral - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	6	3	5	1	0	15
NNE	4	2	3	1	0	0	10
NE	2	6	8	5	0	0	21
ENE	0	7	9	13	2	2	33
E	1	6	12	15	2	0	36
ESE	1	5	27	11	6	0	50
SE	0	12	22	5	0	0	39
SSE	1	12	23	8	0	0	44
S	1	12	28	10	6	14	71
SSW	1	5	11	36	14	1	68
SW	0	3	8	23	5	0	39
WSW	1	6	9	11	1	0	28
W	1	4	6	12	0	0	23
WNW	0	2	12	9	1	0	24
NW	2	8	16	10	1	0	37
NNW	1	4	15	8	3	0	31
Variable	0	0	0	0	0	0	0
Total	16	100	212	182	42	17	569

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 3
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D - 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July - September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
Stability Class - Slightly Stable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	2	2	0	0	8
NNE	1	1	2	0	0	0	4
NE	1	1	5	2	0	1	10
ENE	1	0	1	3	5	13	23
E	1	1	7	5	3	2	19
ESE	0	4	17	4	1	0	26
SE	0	4	6	1	0	0	11
SSE	0	6	16	3	1	0	26
S	2	3	7	18	1	0	31
SSW	2	3	19	57	12	0	93
SW	2	3	14	62	15	0	96
WSW	1	6	7	21	14	0	49
W	1	3	8	22	4	2	40
WNW	0	3	6	13	9	1	32
NW	0	3	11	5	3	0	22
NNW	0	1	5	17	12	0	35
Variable	0	0	0	0	0	0	0
Total	12	46	133	235	80	19	525

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 2
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Moderately Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	6	5	4	5	1	21
NNE	2	2	2	1	0	0	7
NE	0	3	6	1	0	0	10
ENE	1	2	5	1	0	0	9
E	0	1	3	0	0	0	4
ESE	1	5	2	0	0	0	8
SE	1	3	3	0	0	0	7
SSE	0	6	1	1	0	0	8
S	1	1	11	3	0	0	16
SSW	4	2	16	8	0	0	30
SW	3	0	11	16	15	5	50
WSW	0	2	8	9	12	2	33
W	0	4	6	14	2	1	27
WNW	0	7	7	9	7	0	30
NW	1	3	11	9	5	1	30
NNW	0	1	3	7	8	0	19
Variable	0	0	0	0	0	0	0
Total	14	48	100	83	54	10	309

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 6 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, July – September, 2012

Oyster Creek Alpha

Period of Record: July - September 2012
 Stability Class - Extremely Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	13	7	7	0	31
NNE	0	2	0	4	1	0	7
NE	0	3	6	3	0	0	12
ENE	0	2	5	0	0	0	7
E	0	1	4	0	0	0	5
ESE	0	1	1	0	0	0	2
SE	0	1	3	0	0	0	4
SSE	0	2	3	0	0	0	5
S	0	1	5	3	0	0	9
SSW	0	0	10	2	0	0	12
SW	0	5	8	5	2	2	22
WSW	1	7	8	8	7	0	31
W	0	7	12	8	1	1	29
WNW	0	8	10	9	3	0	30
NW	0	4	11	14	1	2	32
NNW	1	4	8	15	5	1	34
Variable	0	0	0	0	0	0	0
Total	2	52	107	78	27	6	272

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 89

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October – December 2012
 Stability Class - Extremely Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	3	0	0	0	5
NNE	0	11	9	0	0	0	20
NE	0	12	10	0	0	0	22
ENE	1	4	3	0	0	0	8
E	0	5	1	0	0	0	6
ESE	0	4	2	0	0	0	6
SE	0	1	6	0	0	0	7
SSE	0	0	2	0	0	0	2
S	0	1	11	0	0	0	12
SSW	0	2	6	1	0	0	9
SW	0	1	2	2	0	0	5
WSW	0	6	17	0	0	0	23
W	0	2	16	0	0	0	18
WNW	0	11	27	3	0	0	41
NW	0	5	28	1	0	0	34
NNW	0	1	2	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	1	68	145	7	0	0	221

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Moderately Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	6	0	0	0	0	8
NNE	0	5	2	0	0	0	7
NE	0	2	2	0	0	0	4
ENE	0	4	2	0	0	0	6
E	0	5	0	0	0	0	5
ESE	0	1	0	0	0	0	1
SE	0	1	1	0	0	0	2
SSE	0	1	5	0	0	0	6
S	0	2	2	0	0	0	4
SSW	0	0	3	0	0	0	3
SW	0	1	1	0	0	0	2
WSW	0	0	7	0	0	0	7
W	0	5	6	0	0	0	11
WNW	0	4	8	2	0	0	14
NW	1	1	6	1	0	0	9
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	3	39	45	3	0	0	90

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Slightly Unstable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	3	0	0	0	0	4
NNE	0	3	0	0	0	0	3
NE	0	2	1	0	0	0	3
ENE	0	3	1	0	0	0	4
E	0	1	0	0	0	0	1
ESE	0	0	1	0	0	0	1
SE	0	0	1	0	0	0	1
SSE	0	1	0	0	0	0	1
S	0	1	1	0	0	0	2
SSW	2	1	1	0	0	0	4
SW	1	0	0	0	0	0	1
WSW	1	0	1	0	0	0	2
W	0	1	0	0	0	0	1
WNW	0	2	4	3	0	0	9
NW	0	1	1	1	0	0	3
NNW	0	6	0	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	5	25	12	4	0	0	46

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
Stability Class - Neutral - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	8	16	4	5	0	0	33
NNE	4	33	16	2	2	0	57
NE	1	20	12	0	1	0	34
ENE	1	17	2	0	0	0	20
E	1	9	1	0	0	0	11
ESE	1	6	1	0	0	0	8
SE	4	1	2	0	0	0	7
SSE	0	1	2	0	0	0	3
S	5	10	12	3	0	0	30
SSW	1	7	13	0	0	0	21
SW	0	4	0	0	0	0	4
WSW	4	18	7	0	0	0	29
W	5	11	10	1	0	0	27
WNW	3	17	16	13	0	0	49
NW	4	27	14	0	0	0	45
NNW	11	27	7	0	0	0	45
Variable	0	0	0	0	0	0	0
Total	53	224	119	24	3	0	423

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the
Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October – December 2012
Stability Class - Slightly Stable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	11	2	1	0	0	18
NNE	9	15	5	6	5	0	40
NE	13	19	12	6	0	0	50
ENE	10	16	3	5	1	0	35
E	9	15	1	2	0	0	27
ESE	1	10	4	2	0	0	17
SE	5	9	7	3	3	0	27
SSE	4	6	8	1	0	0	19
S	4	24	16	3	2	0	49
SSW	3	19	22	0	0	0	44
SW	8	30	1	0	0	0	39
WSW	12	47	14	0	0	0	73
W	10	24	23	1	0	0	58
WNW	5	57	44	11	0	0	117
NW	14	52	18	0	0	0	84
NNW	8	51	7	0	0	0	66
Variable	0	0	0	0	0	0	0
Total	119	405	187	41	11	0	763

Hours of calm in this stability class: 1
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Moderately Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	10	3	0	0	0	0	13
NNE	7	1	0	0	0	0	8
NE	6	0	0	0	0	0	6
ENE	5	2	0	0	0	0	7
E	1	0	0	0	0	0	1
ESE	2	0	0	0	0	0	2
SE	3	0	0	0	0	0	3
SSE	0	0	0	0	0	0	0
S	3	7	0	2	2	0	14
SSW	6	0	0	0	0	0	6
SW	12	15	0	0	0	0	27
WSW	6	18	0	0	0	0	24
W	14	16	0	0	0	0	30
WNW	19	16	0	0	0	0	35
NW	11	15	0	0	0	0	26
NNW	12	30	0	0	0	0	42
Variable	0	0	0	0	0	0	0
Total	117	123	0	2	2	0	244

Hours of calm in this stability class: 1
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 7 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Extremely Stable - 150Ft-33Ft Delta-T (F)
 Winds Measured at 33 Feet

Wind Direction -----	Wind Speed (in mph)						Total -----
	1-3 -----	4-7 -----	8-12 -----	13-18 -----	19-24 -----	> 24 -----	
N	2	0	0	0	0	0	2
NNE	4	0	0	0	0	0	4
NE	1	0	0	0	0	0	1
ENE	1	0	0	0	0	0	1
E	1	0	0	0	0	0	1
ESE	6	0	0	0	0	0	6
SE	4	0	0	0	0	0	4
SSE	4	0	0	0	0	0	4
S	4	5	0	0	0	0	9
SSW	7	1	0	0	0	0	8
SW	23	7	0	0	0	0	30
WSW	70	29	0	0	0	0	99
W	85	14	0	0	0	0	99
WNW	40	5	0	0	0	0	45
NW	32	28	0	0	0	0	60
NNW	18	12	0	0	0	0	30
Variable	0	0	0	0	0	0	0
Total	302	101	0	0	0	0	403

Hours of calm in this stability class: 3
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Extremely Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	1	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	1	0	0	0	1
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	1	3	0	0	4
WNW	0	0	0	3	0	0	3
NW	0	0	0	5	3	0	8
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	0	3	11	3	0	17

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
Stability Class - Moderately Unstable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	4	3	0	0	7
ENE	0	1	1	0	0	0	2
E	0	1	0	0	0	0	1
ESE	0	1	1	1	0	0	3
SE	0	0	1	2	0	0	3
SSE	0	0	1	2	0	0	3
S	0	0	0	0	0	0	0
SSW	0	0	0	3	0	0	3
SW	0	0	0	1	4	0	5
WSW	0	0	1	1	0	0	2
W	0	1	1	4	0	0	6
WNW	0	0	3	7	1	0	11
NW	0	0	3	9	3	1	16
NNW	0	0	0	2	1	0	3
Variable	0	0	0	0	0	0	0
Total	0	4	16	35	9	1	65

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Slightly Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	0	0	0	1
NNE	0	1	1	1	0	0	3
NE	0	0	11	4	0	0	15
ENE	0	0	0	2	0	0	2
E	0	0	1	0	0	0	1
ESE	0	0	2	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	0	0	1	0	0	1
S	0	0	0	1	0	0	1
SSW	0	0	2	6	1	0	9
SW	0	0	0	1	1	0	2
WSW	0	0	1	4	0	0	5
W	0	1	0	7	4	0	12
WNW	0	0	1	10	2	1	14
NW	0	1	5	2	7	2	17
NNW	0	0	0	2	0	0	2
Variable	0	0	0	0	0	0	0
Total	0	3	25	41	15	3	87

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
Stability Class - Neutral - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	6	14	10	1	0	31
NNE	1	12	35	18	6	4	76
NE	2	5	27	36	29	5	104
ENE	1	5	14	10	8	1	39
E	0	9	21	4	0	0	34
ESE	0	2	8	5	2	0	17
SE	2	2	3	8	0	1	16
SSE	0	1	2	1	9	2	15
S	1	4	7	8	1	1	22
SSW	0	4	11	17	15	0	47
SW	0	8	4	6	4	0	22
WSW	0	3	6	10	4	0	23
W	1	11	7	35	15	2	71
WNW	0	4	9	17	14	23	67
NW	1	4	11	40	34	16	106
NNW	1	3	7	28	8	0	47
Variable	0	0	0	0	0	0	0
Total	10	83	186	253	150	55	737

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
Stability Class - Slightly Stable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	11	8	5	0	27
NNE	0	8	15	9	1	11	44
NE	0	3	15	10	1	7	36
ENE	0	1	11	8	4	8	32
E	0	6	12	7	1	2	28
ESE	0	7	7	9	0	1	24
SE	0	5	3	3	10	8	29
SSE	1	5	4	1	0	1	12
S	0	2	7	8	5	10	32
SSW	0	4	8	26	26	1	65
SW	0	5	8	11	12	0	36
WSW	0	2	9	31	7	1	50
W	0	5	4	26	22	0	57
WNW	2	2	4	21	35	11	75
NW	0	1	7	30	46	3	87
NNW	0	4	8	23	16	0	51
Variable	0	0	0	0	0	0	0
Total	3	63	133	231	191	64	685

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Moderately Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	11	24	19	1	55
NNE	0	2	6	23	5	0	36
NE	0	3	17	10	0	0	30
ENE	3	2	3	2	0	0	10
E	0	1	1	0	0	0	2
ESE	0	0	1	1	0	0	2
SE	0	4	0	0	0	0	4
SSE	0	0	3	0	0	0	3
S	0	2	0	1	0	0	3
SSW	0	0	3	8	12	0	23
SW	0	0	3	6	4	3	16
WSW	0	1	4	9	9	3	26
W	0	0	6	7	12	0	25
WNW	0	2	3	8	16	4	33
NW	0	1	1	10	12	8	32
NNW	0	0	3	10	8	0	21
Variable	0	0	0	0	0	0	0
Total	3	18	65	119	97	19	321

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 8 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, October – December, 2012

Oyster Creek Alpha

Period of Record: October - December 2012
 Stability Class - Extremely Stable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	1	14	7	0	24
NNE	0	1	5	12	11	0	29
NE	2	3	11	7	0	0	23
ENE	0	2	7	1	0	0	10
E	1	3	3	1	0	0	8
ESE	1	1	2	2	0	0	6
SE	0	3	2	0	0	0	5
SSE	0	3	1	0	1	0	5
S	0	3	9	6	2	0	20
SSW	3	0	4	1	1	1	10
SW	0	2	5	3	8	0	18
WSW	0	3	1	5	16	3	28
W	1	1	3	2	4	0	11
WNW	0	2	1	11	23	10	47
NW	3	0	4	2	7	1	17
NNW	0	0	6	11	5	0	22
Variable	0	0	0	0	0	0	0
Total	11	29	65	78	85	15	283

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 13

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class - All Stabilities - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	1	20	53	46	56	42	11	0	6	0	0	235
NNE	1	19	28	30	96	59	11	12	5	5	2	268
NE	2	21	48	36	130	114	34	14	5	1	0	405
ENE	0	11	35	56	118	111	60	9	5	1	0	406
E	1	11	31	37	103	58	22	8	4	0	0	275
ESE	1	11	12	22	101	54	21	5	1	0	0	228
SE	1	16	27	20	94	107	61	5	3	4	0	338
SSE	1	17	38	33	60	83	65	25	7	0	0	329
S	0	26	48	47	116	122	116	58	43	19	0	595
SSW	2	36	69	54	129	128	99	23	20	1	0	561
SW	1	62	89	103	212	101	63	20	7	0	0	658
WSW	6	110	256	267	225	90	44	12	6	0	0	1016
W	1	145	320	138	135	119	74	45	32	2	0	1011
WNW	1	90	150	125	201	155	109	60	36	2	0	929
NW	2	49	135	169	213	155	95	52	17	0	0	887
NNW	0	32	70	101	133	54	44	11	5	0	0	450
Tot	21	676	1409	1284	2122	1552	929	359	202	35	2	8591
Hours of Calm					6							
Hours of Variable Direction					0							
Hours of Valid Data					8597							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class - Extremely Unstable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	2	5	13	12	1	0	0	0	0	33
NNE	0	1	1	3	25	22	1	0	0	0	0	53
NE	0	0	2	3	31	40	15	1	0	0	0	92
ENE	0	0	3	5	43	61	30	2	0	0	0	144
E	0	0	6	3	35	23	7	5	0	0	0	79
ESE	0	0	2	2	43	34	9	0	0	0	0	90
SE	0	0	2	5	30	80	48	2	0	0	0	167
SSE	0	0	3	1	11	30	24	8	1	0	0	78
S	0	0	4	1	16	30	63	35	25	4	0	178
SSW	0	0	2	6	8	10	28	10	8	1	0	73
SW	0	1	0	4	25	28	44	15	3	0	0	120
WSW	0	0	2	5	26	39	24	8	4	0	0	108
W	0	0	3	6	31	59	38	23	22	2	0	184
WNW	0	0	1	3	36	71	56	30	11	0	0	208
NW	0	0	2	8	46	69	62	41	14	0	0	242
NNW	0	0	0	1	22	23	22	10	5	0	0	83
Tot	0	2	35	61	441	631	472	190	93	7	0	1932
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					1932							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class - Moderately Unstable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	4	3	10	3	1	0	0	0	0	21
NNE	0	2	0	0	11	3	0	0	0	0	0	16
NE	0	1	3	8	10	5	3	0	0	0	0	30
ENE	0	0	0	4	11	12	6	0	0	0	0	33
E	0	0	1	2	10	3	1	0	0	0	0	17
ESE	0	0	0	0	9	1	0	0	0	0	0	10
SE	0	0	1	3	12	6	1	1	0	0	0	24
SSE	0	0	1	1	6	6	6	5	1	0	0	26
S	0	0	0	4	2	7	8	5	1	1	0	28
SSW	0	1	3	1	3	3	6	2	2	0	0	21
SW	0	0	0	2	3	5	5	1	0	0	0	16
WSW	0	0	2	2	8	10	5	0	1	0	0	28
W	0	0	1	0	8	11	5	4	3	0	0	32
WNW	0	0	4	4	10	14	7	5	0	0	0	44
NW	0	1	2	2	12	15	5	2	1	0	0	40
NNW	0	0	0	3	9	2	3	0	0	0	0	17
Tot	0	5	22	39	134	106	62	25	9	1	0	403
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					403							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class - Slightly Unstable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	3	4	1	3	0	0	0	0	0	11
NNE	0	0	0	0	3	0	0	0	0	0	0	3
NE	0	0	3	0	7	2	0	0	0	0	0	12
ENE	0	0	0	3	8	5	2	0	0	0	0	18
E	0	0	1	2	3	2	2	0	0	0	0	10
ESE	0	0	0	1	4	0	1	0	0	0	0	6
SE	1	0	0	0	9	3	2	0	0	0	0	15
SSE	0	0	0	2	4	5	2	1	0	0	0	14
S	0	0	0	1	6	5	2	0	1	2	0	17
SSW	0	0	3	1	2	2	2	0	0	0	0	10
SW	0	0	0	1	1	6	1	0	0	0	0	9
WSW	0	0	2	0	2	2	1	0	0	0	0	7
W	0	0	1	1	2	2	0	1	0	0	0	7
WNW	0	0	1	2	6	6	3	1	1	1	0	21
NW	0	1	1	3	5	4	3	0	1	0	0	18
NNW	0	0	0	3	4	1	0	0	0	0	0	8
Tot	1	1	15	24	67	48	21	3	3	3	0	186
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					186							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Neutral - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	5	15	15	21	19	8	0	5	0	0	88
NNE	0	5	3	15	42	27	8	8	0	2	0	110
NE	0	6	10	7	50	45	6	8	0	1	0	133
ENE	0	1	9	17	38	21	10	3	0	0	0	99
E	1	4	7	12	25	19	11	1	1	0	0	81
ESE	0	3	2	11	21	9	6	3	0	0	0	55
SE	0	1	9	6	27	9	7	0	1	0	0	60
SSE	0	0	12	9	24	30	19	6	3	0	0	103
S	0	3	11	8	23	38	24	12	8	1	0	128
SSW	0	3	11	8	32	48	28	7	6	0	0	143
SW	0	4	5	7	31	24	8	1	0	0	0	80
WSW	0	2	11	8	38	18	2	2	0	0	0	81
W	0	2	14	13	23	15	13	9	6	0	0	95
WNW	0	8	5	10	41	29	13	9	16	1	0	132
NW	0	1	8	15	55	28	23	9	1	0	0	140
NNW	0	2	24	23	31	10	13	1	0	0	0	104
Tot	1	50	156	184	522	389	199	79	47	5	0	1632
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					1632							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Slightly Stable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	6	11	12	9	5	1	0	1	0	0	45
NNE	0	4	14	10	14	7	2	4	5	3	2	65
NE	0	9	24	14	31	22	9	4	5	0	0	118
ENE	0	5	17	22	17	12	8	4	5	1	0	91
E	0	5	13	15	28	11	1	2	3	0	0	78
ESE	0	1	6	8	24	9	5	2	1	0	0	56
SE	0	8	7	6	16	9	3	2	2	4	0	57
SSE	1	10	13	16	15	12	13	5	2	0	0	87
S	0	10	14	20	64	41	19	6	8	7	0	189
SSW	0	9	25	27	80	64	35	4	4	0	0	248
SW	0	12	25	42	126	38	5	3	4	0	0	255
WSW	1	14	27	67	108	21	12	2	1	0	0	253
W	0	11	32	28	52	31	17	8	1	0	0	180
WNW	0	8	24	46	83	35	30	15	8	0	0	249
NW	0	14	28	41	71	39	2	0	0	0	0	195
NNW	0	7	9	29	45	17	6	0	0	0	0	113
Tot	2	133	289	403	783	373	168	61	50	15	2	2279
Hours of Calm					1							
Hours of Variable Direction					0							
Hours of Valid Data					2280							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Moderately Stable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	5	12	6	2	0	0	0	0	0	0	25
NNE	0	2	9	2	1	0	0	0	0	0	0	14
NE	1	2	5	4	1	0	1	1	0	0	0	15
ENE	0	3	6	5	1	0	3	0	0	0	0	18
E	0	0	3	2	2	0	0	0	0	0	0	7
ESE	0	2	2	0	0	1	0	0	0	0	0	5
SE	0	2	7	0	0	0	0	0	0	0	0	9
SSE	0	5	6	4	0	0	1	0	0	0	0	16
S	0	5	15	8	4	1	0	0	0	4	0	37
SSW	1	11	10	7	4	1	0	0	0	0	0	34
SW	0	10	26	25	24	0	0	0	0	0	0	85
WSW	2	17	32	73	34	0	0	0	0	0	0	158
W	0	17	49	32	16	1	1	0	0	0	0	116
WNW	1	15	34	33	22	0	0	0	0	0	0	105
NW	0	10	17	33	21	0	0	0	0	0	0	81
NNW	0	8	11	20	16	1	0	0	0	0	0	56
Tot	5	114	244	254	148	5	6	1	0	4	0	781
Hours of Calm					1							
Hours of Variable Direction					0							
Hours of Valid Data					782							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 9 Wind Speed by Direction Measured at 33 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Extremely Stable - 150Ft-33Ft Delta-T (F)
Winds Measured at 33 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	1	4	6	1	0	0	0	0	0	0	0	12
NNE	1	5	1	0	0	0	0	0	0	0	0	7
NE	1	3	1	0	0	0	0	0	0	0	0	5
ENE	0	2	0	0	0	0	1	0	0	0	0	3
E	0	2	0	1	0	0	0	0	0	0	0	3
ESE	1	5	0	0	0	0	0	0	0	0	0	6
SE	0	5	1	0	0	0	0	0	0	0	0	6
SSE	0	2	3	0	0	0	0	0	0	0	0	5
S	0	8	4	5	1	0	0	0	0	0	0	18
SSW	1	12	15	4	0	0	0	0	0	0	0	32
SW	1	35	33	22	2	0	0	0	0	0	0	93
WSW	3	77	180	112	9	0	0	0	0	0	0	381
W	1	115	220	58	3	0	0	0	0	0	0	397
WNW	0	59	81	27	3	0	0	0	0	0	0	170
NW	2	22	77	67	3	0	0	0	0	0	0	171
NNW	0	15	26	22	6	0	0	0	0	0	0	69
Tot	12	371	648	319	27	0	1	0	0	0	0	1378
Hours of Calm					4							
Hours of Variable Direction					0							
Hours of Valid Data					1382							
Hours of Missing Data					187							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – All Stabilities - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	1	1	6	26	53	51	60	119	63	16	396
NNE	0	2	6	8	34	40	69	58	70	26	22	335
NE	0	3	7	9	29	62	96	112	109	43	29	499
ENE	0	2	7	7	21	47	67	99	117	43	36	446
E	0	2	2	11	36	59	70	46	51	27	16	320
ESE	0	3	3	12	41	66	52	47	34	18	3	279
SE	0	2	6	19	57	58	80	35	50	13	17	337
SSE	0	4	3	11	47	62	70	65	55	34	9	360
S	0	1	9	13	31	41	66	76	117	47	38	439
SSW	0	2	10	10	28	37	52	107	245	162	72	725
SW	1	3	9	10	40	29	48	71	228	158	92	689
WSW	0	1	5	11	36	27	56	66	187	151	109	649
W	0	4	10	14	35	38	69	88	200	179	89	726
WNW	0	2	3	7	32	36	67	91	210	179	194	821
NW	0	1	8	11	33	57	68	108	242	242	160	930
NNW	0	3	3	4	21	35	53	75	195	181	65	635
Tot	1	36	92	163	547	747	1034	1204	2229	1566	967	8586
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					8586							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
 Stability Class – Extremely Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	0	0	0	0	0	1	2	1	0	4
NNE	0	0	0	0	0	1	2	2	0	0	0	5
NE	0	0	0	0	0	0	1	8	5	4	1	19
ENE	0	0	0	0	0	1	3	12	20	2	0	38
E	0	0	0	0	0	2	5	9	5	2	0	23
ESE	0	0	0	0	0	3	4	0	0	0	0	7
SE	0	0	0	0	0	4	7	9	2	0	0	22
SSE	0	0	0	0	0	2	1	11	6	0	0	20
S	0	0	0	0	0	1	1	2	4	4	2	14
SSW	0	0	0	0	1	0	1	4	3	3	0	12
SW	0	0	0	0	2	0	1	0	7	2	1	13
WSW	0	0	0	0	2	2	1	5	13	6	4	33
W	0	0	0	0	0	1	4	6	12	4	5	32
WNW	0	0	0	0	1	1	3	11	21	11	13	61
NW	0	0	0	0	0	1	4	7	26	26	10	74
NNW	0	0	0	0	0	2	3	6	18	7	11	47
Tot	0	0	0	0	6	21	41	93	144	72	47	424
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					424							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
 Stability Class – Moderately Unstable - 380Ft-33Ft Delta-T (F)
 Winds Measured at 380 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	0	0	0	5	3	4	0	0	0	12
NNE	0	0	0	0	0	1	1	1	0	0	0	3
NE	0	0	0	0	1	1	5	8	4	1	0	20
ENE	0	0	0	0	1	6	4	4	5	1	0	21
E	0	0	0	0	2	6	6	2	0	1	0	17
ESE	0	0	0	0	2	11	4	2	3	0	0	22
SE	0	0	0	0	2	6	20	7	4	0	0	39
SSE	0	0	0	0	2	4	8	13	6	0	0	33
S	0	0	0	0	3	2	4	5	14	4	1	33
SSW	0	0	0	0	0	2	2	11	22	8	11	56
SW	0	0	0	0	2	3	2	5	14	4	3	33
WSW	0	0	0	0	1	3	6	1	10	3	0	24
W	0	0	0	2	2	3	10	12	12	8	6	55
WNW	0	0	0	0	0	5	6	11	18	5	11	56
NW	0	0	0	0	2	7	7	9	26	14	6	71
NNW	0	0	0	0	2	2	4	2	20	10	4	44
Tot	0	0	0	2	22	67	92	97	158	59	42	539
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					539							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha												
Period of Record: January - December 2012												
Stability Class – Slightly Unstable - 380Ft-33Ft Delta-T (F)												
Winds Measured at 380 Feet												
Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	0	0	2	1	1	1	2	1	0	8
NNE	0	0	0	0	2	4	2	3	0	0	0	11
NE	0	0	0	0	1	10	11	9	6	0	0	37
ENE	0	0	1	1	3	5	8	6	13	0	0	37
E	0	0	0	1	7	8	5	3	5	2	0	31
ESE	0	0	0	0	0	6	5	0	0	0	0	11
SE	0	0	0	0	6	8	16	3	7	0	0	40
SSE	0	0	0	0	0	6	13	12	3	1	0	35
S	0	0	1	2	0	1	9	9	17	1	0	40
SSW	0	0	0	0	2	7	3	8	31	6	6	63
SW	0	0	1	0	0	2	2	1	9	4	2	21
WSW	0	0	0	1	5	3	2	6	11	4	0	32
W	0	0	0	1	1	2	8	9	14	14	5	54
WNW	0	0	0	1	1	3	8	9	27	5	13	67
NW	0	0	0	1	9	12	13	9	12	8	21	85
NNW	0	0	0	0	3	2	5	5	5	6	2	28
Tot	0	0	3	8	42	80	111	93	162	52	49	600
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					600							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Neutral - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	0	2	13	19	16	23	26	9	2	110
NNE	0	1	4	6	12	20	40	25	22	8	4	142
NE	0	1	2	5	8	29	38	41	65	36	18	243
ENE	0	0	3	3	11	18	28	51	64	28	10	216
E	0	0	1	4	13	25	34	15	20	13	4	129
ESE	0	1	1	4	16	26	24	26	19	14	1	132
SE	0	2	2	6	29	24	24	11	28	5	6	137
SSE	0	2	2	3	21	25	30	22	30	28	8	171
S	0	0	5	5	18	21	30	28	39	17	20	183
SSW	0	0	2	3	13	10	18	30	83	59	24	242
SW	0	0	2	5	11	7	9	21	55	43	9	162
WSW	0	0	1	3	10	5	17	20	44	22	9	131
W	0	1	6	6	13	9	15	26	56	28	26	186
WNW	0	0	2	0	10	10	18	27	37	29	64	197
NW	0	1	3	7	9	18	18	32	76	59	48	271
NNW	0	1	1	2	5	9	21	27	37	25	23	151
Tot	0	10	37	64	212	275	380	425	701	423	276	2803
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					2803							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha												
Period of Record: January - December 2012												
Stability Class – Slightly Stable - 380Ft-33Ft Delta-T (F)												
Winds Measured at 380 Feet												
Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	1	1	4	14	13	10	15	10	0	68
NNE	0	0	1	1	10	6	15	13	11	1	11	69
NE	0	1	3	2	5	9	16	10	13	1	10	70
ENE	0	1	0	1	0	6	10	13	13	11	26	81
E	0	0	0	3	9	10	13	14	19	9	12	89
ESE	0	1	1	6	17	18	9	15	10	4	2	83
SE	0	0	2	5	11	10	5	3	8	8	11	63
SSE	0	2	0	4	16	15	11	4	9	4	1	66
S	0	1	2	3	6	8	7	12	28	14	15	96
SSW	0	1	2	4	6	8	17	28	82	75	23	246
SW	0	1	3	3	13	12	17	25	103	71	45	293
WSW	0	1	2	2	10	6	10	17	73	67	34	222
W	0	2	4	2	10	6	11	16	62	77	17	207
WNW	0	2	1	1	3	6	12	15	50	53	38	181
NW	0	0	1	2	5	3	7	30	56	69	27	200
NNW	0	1	1	0	6	7	9	18	49	71	12	174
Tot	0	14	24	40	131	144	182	243	601	545	284	2208
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					2208							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Moderately Stable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	1	0	0	6	5	10	10	49	26	10	117
NNE	0	1	1	0	5	5	4	7	25	8	0	56
NE	0	0	0	1	5	9	13	14	10	0	0	52
ENE	0	1	3	2	2	3	6	9	0	1	0	27
E	0	1	1	2	2	2	3	1	2	0	0	14
ESE	0	0	1	2	5	0	2	2	0	0	0	12
SE	0	0	2	5	4	5	1	1	0	0	0	18
SSE	0	0	0	2	4	6	2	3	0	0	0	17
S	0	0	1	1	1	4	8	7	10	1	0	33
SSW	0	0	4	2	2	5	8	14	21	11	6	73
SW	1	2	3	1	3	2	9	10	29	25	25	110
WSW	0	0	1	1	2	4	8	7	26	26	44	119
W	0	0	0	0	4	7	9	11	32	35	18	116
WNW	0	0	0	4	8	5	10	9	30	37	23	126
NW	0	0	1	0	3	9	10	8	28	34	40	133
NNW	0	0	0	1	2	3	5	9	32	45	9	106
Tot	1	6	18	24	58	74	108	122	294	249	175	1129
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					1129							
Hours of Missing Data					198							
Hours in Period					8784							

Oyster Creek 2012 Annual Radioactive Effluent Release Report

Table D – 10 Wind Speed by Direction Measured at 380 Feet for various Stability Classes for the Oyster Creek Generating Station, January – December, 2012

Oyster Creek Alpha

Period of Record: January - December 2012
Stability Class – Extremely Stable - 380Ft-33Ft Delta-T (F)
Winds Measured at 380 Feet

Wind Direction Sector	Wind Speed (in m/s)											Total
	<0.50	0.5-1	1.1-1.5	1.6-2	2.1-3	3.1-4	4.1-5	5.1-6	6.1-8	8.1-10	>10.0	
N	0	0	0	3	1	9	8	11	25	16	4	77
NNE	0	0	0	1	5	3	5	7	12	9	7	49
NE	0	1	2	1	9	4	12	22	6	1	0	58
ENE	0	0	0	0	4	8	8	4	2	0	0	26
E	0	1	0	1	3	6	4	2	0	0	0	17
ESE	0	1	0	0	1	2	4	2	2	0	0	12
SE	0	0	0	3	5	1	7	1	1	0	0	18
SSE	0	0	1	2	4	4	5	0	1	1	0	18
S	0	0	0	2	3	4	7	13	5	6	0	40
SSW	0	1	2	1	4	5	3	12	3	0	2	33
SW	0	0	0	1	9	3	8	9	11	9	7	57
WSW	0	0	1	4	6	4	12	10	10	23	18	88
W	0	1	0	3	5	10	12	8	12	13	12	76
WNW	0	0	0	1	9	6	10	9	27	39	32	133
NW	0	0	3	1	5	7	9	13	18	32	8	96
NNW	0	1	1	1	3	10	6	8	34	17	4	85
Tot	0	6	10	25	76	86	120	131	169	166	94	883
Hours of Calm					0							
Hours of Variable Direction					0							
Hours of Valid Data					883							
Hours of Missing Data					198							
Hours in Period					8784							

Appendix E
ODCM Revisions

None

Appendix F
ERRATA

None