

Exelon

Nuclear



Annual Radioactive Effluent Release Report
No. 34

2008

Limerick Generating Station

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
LICENSEE: EXELON GENERATION COMPANY, LLC

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

NO. 34

January 1, 2008 Through December 31, 2008

EXELON GENERATION COMPANY, LLC

**LIMERICK GENERATING STATION
UNITS NO. 1 AND 2**

DOCKET NO. 50-352 (Unit 1)

DOCKET NO. 50-353 (Unit 2)

**Submitted to
The United States Nuclear Regulatory Commission
Pursuant to
Facility Operating License:**

**NPF-39 (Unit 1)
NPF-85 (Unit 2)**

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1. Introduction

In accordance with the reporting requirements of Technical Specification 6.9.1.8 applicable during the reporting period, this report summarizes the effluent release data for Limerick Generating Station Units 1 and 2 for the period January 1, 2008 through December 31, 2008. 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 2008 report is complete.

2. Supplemental Information

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 3.2.2.1.a
	≤ 3000	mrem/Yr	Skin	
b.	≤ 10	mRad	Air Gamma	Quarterly air dose limits ODCM Control 3.2.2.2.a
	≤ 20	mRad	Air Beta	
c.	≤ 20	mRad	Air Gamma	Yearly air dose limits ODCM Control 3.2.2.2.b
	≤ 40	mRad	Air Beta	
d.	≤ 10	mrem	Total Body (Gamma)	10 CFR 50, Appendix I, Section II.B.2(b)
	≤ 30	mrem	Skin (Beta)	
2. Iodines, Tritium, Particulates with Half Life > 8 days:				
a.	≤ 1500	mrem/Yr	Any Organ	ODCM Control 3.2.2.1.b
b.	≤ 15	mrem	Any Organ	Quarterly dose limits ODCM Control 3.2.2.3.a
c.	≤ 30	mrem	Any Organ	Yearly dose limits ODCM Control 3.2.2.3.b
3. Liquid Effluents				
a.	Concentration 10 CFR 20, Appendix B, Table 2 Col. 2			ODCM Control 3.2.1.1
b.	≤ 3	mrem	Total Body	Quarterly dose limits ODCM Control 3.2.1.2.a
	≤ 10	mrem	Any Organ	
c.	≤ 6	mrem	Total Body	Yearly dose limits ODCM Control 3.2.1.2.b
	≤ 20	mrem	Any Organ	
4. 40 CFR 190				
	≤ 25	mrem	Total Body or Organ	Yearly dose limits ODCM Control 3.2.3
	≤ 75	mrem	Thyroid	

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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 3.2.2.2.a and 3.2.2.2.b.

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 the Limerick Offsite Dose Calculation Manual Control 3.2.1.1. The total activity concentration for all dissolved or entrained gases was limited to $\leq 2E-04$ $\mu\text{Ci/ml}$.

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

The Limerick 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, Evaluation, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," maybe used to calculate doses in lieu of more sophisticated software. The Limerick 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 and NUREG-0133, "Preparation of Radiological Effluent Technical Specifications for Nuclear Power Plants, October 1978. Therefore, average energies are not applicable to Limerick.

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 ODCM Table 4.2-2. Additional vent grab samples were taken from the North Stack, Unit 1 South Stack and Unit 2 South Stack and analyzed at least monthly to determine the isotopic mixture of noble gas activity released for the month. The data from the noble gas radiation monitor were analyzed to report net noble gas effluent activity. When no activity was found in the grab isotopic analysis, the isotopic mixture was assumed to be that evaluated in the UFSAR (Section 11.5, Table 11.5-4). If activity was found in the grab isotopic analysis, the isotopic mixture for the Noble Gas Monitor was determined from that isotopic mixture.

Each month a monitor background was determined at the time of the noble gas grab sample and used to determine net radiation monitor activity. When no isotopic activity was identified in the grab noble gas sample, the noble gas radiation monitor 15-minute average data for one-hour prior to and one-hour post noble gas grab sampling were used to determine monitor background for the month. The mean plus two standard deviations was used as background for each Noble Gas Monitor. When activity was identified the background determination was made from the last month that no activity was found.

2. Particulates and Iodines

The method used for Gamma Isotopic Analysis is the Canberra Gamma Spectroscopy System with a particulate filter (47 mm) or charcoal cartridge, respectively. Particulate and iodine activity was continuously sampled and analyzed in accordance with ODCM Table 4.2-2. Charcoal and particulate samples are taken from the North Stack, Unit 1 South Stack, Unit 2 South Stack and the Hot Maintenance Shop exhausts and analyzed

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at least weekly to determine the total activity released from the plant based on the highest vent flow rates recorded for the sampling period.

3. Liquid Effluents

Each batch of liquid effluent was sampled and analyzed for gamma isotopic activity in accordance with ODCM Table 4.2-1 prior to release. The total activity of each released batch was determined by multiplying each nuclide's concentration by the total volume discharged and then summing. The total activity released during a month was then determined by summing the activity content of all batch releases discharged during the month.

4. Tritium in Liquid and Gaseous Effluents:

Tritium in Liquid Effluents is analyzed using a Liquid Scintillation Counter.

Air from stack effluents was passed through two bubblers in series and an aliquot of the water from each bubbler was analyzed using a Liquid Scintillation Counter.

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

Particulate air samples were composited quarterly and analyzed for gross alpha, Sr-89 and Sr-90. Liquid radwaste samples were composited monthly and quarterly and analyzed for gross alpha (monthly) and Fe-55, Sr-89 and Sr-90 (quarterly). These composites were submitted to an offsite vendor laboratory for analysis. The ODCM required lower limit of detection for airborne and liquid releases are as follows:

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

6. 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.

E. Batch Releases:

1. Liquid

	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Number of Batch Releases	8.80E+01	4.70E+01	4.40E+01	3.70E+01
Total time period for batch releases (min)	7.73E+03	3.60E+03	4.02E+03	3.33E+03
Maximum time period for batch release (min)	1.16E+02	1.08E+02	1.31E+02	1.03E+02
Average time period for batch release (min)	8.78E+01	7.65E+01	9.13E+01	8.99E+01
Minimum time period for batch release (min)	5.36E+01	2.37E+01	3.24E+01	5.04E+01
Average stream flow (Schuylkill River) during periods of release of effluents into a flowing stream (gpm)	2.08E+06	7.26E+05	3.16E+05	1.10E+06

2. Gaseous

Oil Incineration				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Number of Batch Releases	0	0	0	0
Total time period for batch releases (min)	0	0	0	0
Maximum time period for batch release (min)	0	0	0	0
Average time period for batch release (min)	0	0	0	0
Minimum time period for batch release (min)	0	0	0	0

Other Batch Releases				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Number of Batch Releases	6.00E+00	2.00E+00	0	0
Total time period for batch releases (min)	1.27E+04	3.72E+03	0	0
Maximum time period for batch release (min)	2.50E+01	2.22E+03	0	0
Average time period for batch release (min)	2.12E+03	1.86E+03	0	0
Minimum time period for batch release (min)	9.00E+01	1.50E+03	0	0

F. Abnormal Releases:

1. <u>Liquid</u>	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Number of Releases	0	2	0	0
Total Activity Released (Ci)	0	8.36E-05	0	0
2. <u>Gaseous</u>				
Number of Releases	6	2	0	0
Total Activity Released (Ci)	2.1E-05	1.82E-06	0	0

G. Revisions to the ODCM

Revision 24 of CY-LG-170-301, Offsite Dose Calculation Manual was approved on July 21, 2008. A complete copy is included in the mailing.

H. Radioactive Effluent Monitoring Instrumentation Out of Service for More Than 30 Days

Per ODCM Control 3.1.1, "Radioactive Liquid Effluent Monitoring Instrumentation" and Control 3.1.2 "Radioactive Gaseous Effluent Monitoring Instrumentation", instrumentation requires:

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With less than the minimum number of radioactive gaseous effluent monitoring instrumentation channels OPERABLE, take the ACTION shown in Table 3.1-1 (liquids) or and Table 3.1-2 (gas). Restore the inoperable instrumentation to OPERABLE status within the time specified in the ACTION or explain in the next Annual Radioactive Effluent Release Report why this inoperability was not corrected within the time specified. The following is a discussion of instrumentation out of service for greater than 30 days:

Per IR 789169, the Liquid Radwaste effluent line flow monitor was declared inoperable on June 22, 2008 and remained inoperable through the end of 2008. Release flows were conservatively reduced to ensure that release flows did not exceed the ODCM limit of 255 gallons per minute.

The effluent line flow monitor was not repaired in the 30-day time frame was due to the complex troubleshooting that was required to determine the cause of the suspect flow readings. The flow orifice was eventually replaced, which required an engineering change request to evaluate the replacement. However, this did not eliminate the issue. Troubleshooting is continuing.

I. Independent Spent Fuel Storage Installation (ISFSI)

An Independent Spent Fuel Storage Installation (ISFSI) was placed in service starting July 21, 2008. In 2008 a total of two canisters were placed in long-term storage. The dose to offsite individuals was non detectable.

J. Compliance to 40 CFR 190 Limits

The radioactive material released during this reporting period and the doses listed in this report were within the limits of the ODCM and 40 CFR 190. A detailed analysis of doses to Members of the Public is presented in Appendix C, Radiological Impact to Man.

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Appendix A
Effluent and Waste Disposal Summary

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TABLE A -1 GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

PERIOD 2008

A. FISSION AND ACTIVATION GASSES

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total Release	Ci	9.65E+00	5.57E+01	6.06E+00	1.94E+00	3.66E+01
2. Average Release Rate for Period	uCi/sec	1.23E+00	7.08E+00	7.16E-01	2.47E-01	
3. Dose						
- Gamma Air Dose	mrad	1.78E-02	5.50E-02	8.25E-03	2.13E-03	
- Beta Air Dose	mrad	1.04E-02	3.42E-02	4.93E-03	1.31E-03	
4. Percent of ODCM Limit						
- Gamma Air Dose	%	1.78E-01	5.50E-01	8.25E-02	2.13E-02	
- Beta Air Dose	%	5.20E-02	1.71E-01	2.47E-02	6.55E-03	

B. IODINES

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total – I-131	Ci	< LLD	< LLD	< LLD	< LLD	2.04E+01
2. Average Release Rate for Period	uCi/sec	< LLD	< LLD	< LLD	< LLD	
3. Percent of ODCM Limit	%	*	*	*	*	

C. PARTICULATES

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Particulates with T 1/2 > 8 days	Ci	8.24E-05	1.92E-06	< LLD	< LLD	2.26E+01
2. Average Release Rate for Period	uCi/sec	1.05E-05	2.44E-07	< LLD	< LLD	
3. Percent of ODCM Limit	%	*	*	*	*	
4. Gross Alpha Radioactivity	Ci	< LLD	< LLD	< LLD	< LLD	

D. TRITIUM

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total Release	Ci	1.28E+00	3.73E-01	1.04E+01	9.52E+00	1.57E+01
2. Average Release Rate for Period	uCi/sec	1.63E-01	4.75E-02	1.23E+00	1.21E+00	
3. Percent of ODCM Limit	%	*	*	*	*	

E. Iodine 131 & 133, Tritium & Particulate

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1. Organ Dose	mrem	3.81E-03	9.00E-04	2.46E-02	2.26E-02
2. Percent of ODCM Limit	%	2.54E-02	6.00E-03	1.64E-01	1.51E-01

* ODCM Limit for combined Iodine, tritium and particulate only, which is shown in Item E.

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TABLE A - 2 GASEOUS EFFLUENTS FOR RELEASE POINT – NORTH STACK

PERIOD 2008

1. FISSION AND ACTIVATION GASSES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
AR-41	Ci	< LLD	< LLD	< LLD	< LLD
KR-85	Ci	6.29E-01	3.14E-03	1.71E-01	1.62E-02
KR-85M	Ci	1.67E-01	8.31E-04	4.53E-02	4.29E-03
KR-87	Ci	2.92E-01	1.46E-03	7.94E-02	7.53E-03
KR-88	Ci	5.16E-01	2.58E-03	1.40E-01	1.33E-02
XE-131M	Ci	1.58E-02	7.86E-05	4.28E-03	4.06E-04
XE-133	Ci	5.87E-02	2.93E-04	1.60E-02	1.51E-03
XE-133M	Ci	< LLD	< LLD	< LLD	< LLD
XE-135	Ci	2.30E+00	1.15E-02	6.25E-01	5.93E-02
XE-135M	Ci	1.47E+00	7.31E-03	3.98E-01	3.78E-02
XE-138	Ci	3.14E+00	1.57E-02	8.54E-01	8.10E-02
Total for Period	Ci	8.58E+00	4.28E-02	2.33E+00	2.21E-01

2. IODINES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
I-131	Ci	< LLD	< LLD	< LLD	< LLD
I-133	Ci	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	< LLD	< LLD	< LLD	< LLD

3. PARTICULATES (T 1/2 > 8 DAYS)

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CR-51	Ci	< LLD	< LLD	< LLD	< LLD
MN-54	Ci	< LLD	< LLD	< LLD	< LLD
CO-58	Ci	< LLD	< LLD	< LLD	< LLD
CO-60	Ci	< LLD	< LLD	< LLD	< LLD
SR-89	Ci	< LLD	< LLD	< LLD	< LLD
SR-90	Ci	< LLD	< LLD	< LLD	< LLD
MO-99	Ci	< LLD	< LLD	< LLD	< LLD
AG-110M	Ci	< LLD	< LLD	< LLD	< LLD
CS-134	Ci	< LLD	< LLD	< LLD	< LLD
CS-137	Ci	< LLD	< LLD	< LLD	< LLD
BA-140	Ci	< LLD	< LLD	< LLD	< LLD
LA-140	Ci	< LLD	< LLD	< LLD	< LLD
CE-141	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	< LLD	< LLD	< LLD	< LLD

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TABLE A - 3 GASEOUS EFFLUENTS FOR RELEASE POINT – UNIT 1 SOUTH STACK PERIOD 2008

1. FISSION AND ACTIVATION GASSES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
AR-41	Ci	6.47E-02	3.97E+00	2.66E-01	3.27E-02
KR-85	Ci	< LLD	< LLD	< LLD	< LLD
KR-85M	Ci	1.55E-02	9.51E-01	6.38E-02	7.84E-03
KR-87	Ci	1.55E-02	9.51E-01	6.38E-02	7.84E-03
KR-88	Ci	1.55E-02	9.51E-01	6.38E-02	7.84E-03
XE-133	Ci	3.36E-01	2.06E+01	1.38E+00	1.70E-01
XE-133M	Ci	< LLD	< LLD	< LLD	< LLD
XE-135	Ci	1.76E-01	1.08E+01	7.23E-01	8.89E-02
XE-135M	Ci	2.38E-01	1.46E+01	9.79E-01	1.20E-01
XE-138	Ci	3.62E-02	2.22E+00	1.49E-01	1.83E-02
Total for Period	Ci	8.97E-01	5.50E+01	3.69E+00	4.54E-01

2. IODINES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
I-131	Ci	< LLD	< LLD	< LLD	< LLD
I-133	Ci	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	< LLD	< LLD	< LLD	< LLD

3. PARTICULATES (T 1/2 > 8 DAYS)

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CR-51	Ci	< LLD	< LLD	< LLD	< LLD
MN-54	Ci	5.99E-06	< LLD	< LLD	< LLD
CO-58	Ci	< LLD	< LLD	< LLD	< LLD
CO-60	Ci	2.20E-05	< LLD	< LLD	< LLD
SR-89	Ci	< LLD	< LLD	< LLD	< LLD
SR-90	Ci	< LLD	< LLD	< LLD	< LLD
MO-99	Ci	< LLD	< LLD	< LLD	< LLD
AG-110M	Ci	< LLD	< LLD	< LLD	< LLD
CS-134	Ci	< LLD	< LLD	< LLD	< LLD
CS-137	Ci	< LLD	< LLD	< LLD	< LLD
BA-140	Ci	< LLD	< LLD	< LLD	< LLD
LA-140	Ci	< LLD	< LLD	< LLD	< LLD
CE-141	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	2.80E-05	< LLD	< LLD	< LLD

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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TABLE A - 4 GASEOUS EFFLUENTS FOR RELEASE POINT – UNIT 2 SOUTH STACK PERIOD 2008

1. FISSION AND ACTIVATION GASSES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
AR-41	Ci	1.18E-02	4.07E-02	2.60E-03	9.14E-02
KR-85	Ci	< LLD	< LLD	< LLD	< LLD
KR-85M	Ci	2.83E-03	9.75E-03	6.23E-04	2.19E-02
KR-87	Ci	2.83E-03	9.75E-03	6.23E-04	2.19E-02
KR-88	Ci	2.83E-03	9.75E-03	6.23E-04	2.19E-02
XE-133	Ci	6.13E-02	2.11E-01	1.35E-02	4.75E-01
XE-133M	Ci	< LLD	< LLD	< LLD	< LLD
XE-135	Ci	3.21E-02	1.10E-01	7.06E-03	2.48E-01
XE-135M	Ci	4.34E-02	1.50E-01	9.56E-03	3.36E-01
XE-138	Ci	6.61E-03	2.28E-02	1.46E-03	5.12E-02
Total for Period	Ci	1.64E-01	5.64E-01	3.60E-02	1.27E+00

2. IODINES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
I-131	Ci	< LLD	< LLD	< LLD	< LLD
I-133	Ci	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	< LLD	< LLD	< LLD	< LLD

3. PARTICULATES (T 1/2 > 8 DAYS)

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CR-51	Ci	< LLD	< LLD	< LLD	< LLD
MN-54	Ci	1.81E-05	< LLD	< LLD	< LLD
CO-58	Ci	< LLD	< LLD	< LLD	< LLD
CO-60	Ci	1.43E-05	< LLD	< LLD	< LLD
SR-89	Ci	< LLD	< LLD	< LLD	< LLD
SR-90	Ci	< LLD	< LLD	< LLD	< LLD
MO-99	Ci	< LLD	< LLD	< LLD	< LLD
AG-110M	Ci	< LLD	< LLD	< LLD	< LLD
CS-134	Ci	< LLD	< LLD	< LLD	< LLD
CS-137	Ci	< LLD	< LLD	< LLD	< LLD
BA-140	Ci	< LLD	< LLD	< LLD	< LLD
LA-140	Ci	< LLD	< LLD	< LLD	< LLD
CE-141	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	3.24E-05	< LLD	< LLD	< LLD

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

TABLE A - 5 GASEOUS EFFLUENTS FOR RELEASE POINT – HOT MAINTENANCE SHOP PERIOD 2008

1. FISSION AND ACTIVATION GASSES

NO ANALYSIS PERFORMED FOR ACTIVATION GASSES. PATHWAY DOES NOT EXIST.

2. IODINES

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
I-131	Ci	< LLD	< LLD	< LLD	< LLD
I-133	Ci	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	< LLD	< LLD	< LLD	< LLD

3. PARTICULATES (T 1/2 > 8 DAYS)

Nuclide Released	Continuous Mode				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CR-51	Ci	< LLD	< LLD	< LLD	< LLD
MN-54	Ci	< LLD	< LLD	< LLD	< LLD
CO-58	Ci	< LLD	< LLD	< LLD	< LLD
CO-60	Ci	9.28E-08	9.97E-08	< LLD	< LLD
SR-89	Ci	< LLD	< LLD	< LLD	< LLD
SR-90	Ci	< LLD	< LLD	< LLD	< LLD
MO-99	Ci	< LLD	< LLD	< LLD	< LLD
AG-110M	Ci	< LLD	< LLD	< LLD	< LLD
CS-134	Ci	< LLD	< LLD	< LLD	< LLD
CS-137	Ci	< LLD	< LLD	< LLD	< LLD
BA-140	Ci	< LLD	< LLD	< LLD	< LLD
LA-140	Ci	< LLD	< LLD	< LLD	< LLD
CE-141	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	9.28E-08	9.97E-08	< LLD	< LLD

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

TABLE A - 6 GASEOUS EFFLUENTS FOR RELEASE POINT – OIL INCINERATION PERIOD 2008

NO OIL BURNING OCCURRED IN 2008.

1. FISSION AND ACTIVATION GASSES

NO ANALYSIS PERFORMED FOR ACTIVATION GASSES. PATHWAY DOES NOT EXIST.

2. IODINES

Nuclide Released	Batch Release				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
I-131	Ci	N/A	N/A	N/A	N/A
I-133	Ci	N/A	N/A	N/A	N/A
I-135	Ci	N/A	N/A	N/A	N/A
Total for Period	Ci	N/A	N/A	N/A	N/A

3. PARTICULATES (T 1/2 > 8 DAYS)

Nuclide Released	Batch Release				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CR-51	Ci	N/A	N/A	N/A	N/A
MN-54	Ci	N/A	N/A	N/A	N/A
CO-58	Ci	N/A	N/A	N/A	N/A
CO-60	Ci	N/A	N/A	N/A	N/A
SR-89	Ci	N/A	N/A	N/A	N/A
SR-90	Ci	N/A	N/A	N/A	N/A
MO-99	Ci	N/A	N/A	N/A	N/A
AG-110M	Ci	N/A	N/A	N/A	N/A
CS-134	Ci	N/A	N/A	N/A	N/A
CS-137	Ci	N/A	N/A	N/A	N/A
BA-140	Ci	N/A	N/A	N/A	N/A
LA-140	Ci	N/A	N/A	N/A	N/A
CE-141	Ci	N/A	N/A	N/A	N/A
CE-144	Ci	N/A	N/A	N/A	N/A
CE-144	Ci	N/A	N/A	N/A	N/A
Total for Period	Ci	N/A	N/A	N/A	N/A

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

TABLE A -7 GASEOUS EFFLUENTS FOR RELEASE POINT – OTHER BATCH RELEASES PERIOD 2008

1. FISSION AND ACTIVATION GASSES

Nuclide Released	Batch Release				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
AR-41	Ci	N/A	N/A	N/A	N/A
KR-85	Ci	N/A	N/A	N/A	N/A
KR-85M	Ci	N/A	N/A	N/A	N/A
KR-87	Ci	N/A	N/A	N/A	N/A
KR-88	Ci	N/A	N/A	N/A	N/A
XE-133	Ci	N/A	N/A	N/A	N/A
XE-133M	Ci	N/A	N/A	N/A	N/A
XE-135	Ci	N/A	N/A	N/A	N/A
XE-135M	Ci	N/A	N/A	N/A	N/A
XE-138	Ci	N/A	N/A	N/A	N/A
Total for Period	Ci	N/A	N/A	N/A	N/A

2. IODINES

Nuclide Released	Batch Release				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
I-131	Ci	< LLD	< LLD	< LLD	< LLD
I-133	Ci	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	< LLD	< LLD	< LLD	< LLD

3. PARTICULATES (T 1/2 > 8 DAYS)

Nuclide Released	Batch Release				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CR-51	Ci	< LLD	< LLD	< LLD	< LLD
MN-54	Ci	3.29E-06	8.49E-07	< LLD	< LLD
CO-58	Ci	1.60E-06	< LLD	< LLD	< LLD
CO-60	Ci	1.40E-05	9.71E-07	< LLD	< LLD
ZN-65	Ci	3.01E-06	< LLD	< LLD	< LLD
MO-99	Ci	< LLD	< LLD	< LLD	< LLD
AG-110M	Ci	< LLD	< LLD	< LLD	< LLD
CS-134	Ci	< LLD	< LLD	< LLD	< LLD
CS-137	Ci	< LLD	< LLD	< LLD	< LLD
BA-140	Ci	< LLD	< LLD	< LLD	< LLD
LA-140	Ci	< LLD	< LLD	< LLD	< LLD
CE-141	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	2.19E-05	1.82E-06	< LLD	< LLD

TABLE A - 8 LIQUID EFFLUENTS – SUMMATION OF ALL RELEASES

PERIOD 2008

A. FISSION AND ACTIVATION PRODUCTS

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total release (not including tritium, gasses & alpha)	Ci	5.07E-03	2.54E-03	5.28E-02	8.93E-03	2.11E+01
2. Average diluted concentration during batch discharge for the period	uCi/ml	2.87E-08	3.13E-08	5.27E-07	1.08E-07	
3. Dose - Whole Body	mrem	7.24E-04	4.35E-03	6.14E-03	2.28E-03	
- Organ	mrem	8.62E-04	6.35E-03	9.18E-04	3.34E-03	
4. % of ODCM Limit - Whole Body Dose*	%	2.41E-02	1.45E-01	2.05E-01	7.60E-02	
- Organ Dose*	%	8.62E-03	6.35E-02	9.18E-03	3.34E-02	

B. TRITIUM

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total Release	Ci	2.03E+01	7.09E+00	6.97E+00	6.75E+00	6.43E+00
2. Average diluted concentration during batch discharge for the period	uCi/ml	1.15E-04	8.73E-05	6.95E-05	8.18E-05	
3. % of ODCM Limit - ECL	%	1.15E+00	8.37E-01	6.95E-01	8.18E-01	

C. DISSOLVED AND ENTRAINED GASSES

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total release	Ci	6.65E-04	3.75E-06	2.66E-05	< LLD	2.11E+01
2. Average diluted concentration during batch discharge for the period	uCi/ml	3.76E-09	4.62E-11	2.65E-10	< LLD	
3. % of ODCM Limit - ECL	%	1.88E-03	2.31E-05	1.33E-04	N/A	

D. GROSS ALPHA RADIOACTIVITY

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
1. Total release	Ci	< LLD	< LLD	< LLD	< LLD	2.30E+01
2. Average diluted concentration during batch discharge for the period	uCi/ml	< LLD	< LLD	< LLD	< LLD	

	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Est. Total Error %
E. Volume of waste released (prior to dilution)	Liters	5.62E+06	2.49E+06	2.47E+06	2.13E+06	5.00E+00

F. Volume of dilution water used during period	Liters	1.71E+08	7.88E+07	9.78E+07	8.04E+07	3.56E+00
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* Percent of limit includes tritium.

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

TABLE A - 9 LIQUID EFFLUENTS FOR RELEASE POINT – LIQUID RADWASTE

PERIOD 2008

Nuclide Released	Batch Release				
	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4
NA-24	Ci	< LLD	7.81E-06	2.28E-06	2.03E-06
CR-51	Ci	6.79E-04	1.53E-05	< LLD	< LLD
MN-54	Ci	1.34E-03	8.49E-04	5.66E-04	2.95E-04
FE-55	Ci	< LLD	< LLD	5.01E-02	6.92E-03
MN-56	Ci	< LLD	< LLD	< LLD	1.26E-06
CO-58	Ci	1.62E-04	4.64E-05	2.47E-05	5.23E-06
FE-59	Ci	3.84E-04	1.27E-05	< LLD	< LLD
CO-60	Ci	2.21E-03	8.84E-04	1.29E-03	8.83E-04
NI-63	Ci	< LLD	< LLD	< LLD	< LLD
CU-64	Ci	< LLD	< LLD	< LLD	< LLD
NI-65	Ci	< LLD	< LLD	< LLD	< LLD
ZN-65	Ci	1.64E-04	5.43E-05	3.14E-04	1.85E-04
ZN-69	Ci	< LLD	< LLD	< LLD	< LLD
ZN-69M	Ci	< LLD	< LLD	2.45E-06	< LLD
SR-89	Ci	< LLD	< LLD	< LLD	< LLD
SR-90	Ci	< LLD	< LLD	< LLD	< LLD
NB-95	Ci	2.44E-06	< LLD	< LLD	< LLD
ZR-95	Ci	1.61E-06	< LLD	< LLD	< LLD
RU-105	Ci	1.44E-06	< LLD	< LLD	< LLD
AG-110M	Ci	< LLD	< LLD	< LLD	< LLD
SB-124	Ci	5.02E-05	6.86E-06	7.84E-06	2.75E-06
SB-125	Ci	3.01E-05	8.79E-05	2.18E-04	1.71E-04
I-131	Ci	< LLD	< LLD	< LLD	4.23E-07
I-133	Ci	< LLD	6.30E-07	< LLD	< LLD
CS-134	Ci	< LLD	2.31E-05	8.56E-06	1.84E-05
CS-137	Ci	3.64E-05	5.48E-04	2.68E-04	4.50E-04
BA-140	Ci	< LLD	< LLD	< LLD	< LLD
LA-140	Ci	< LLD	7.54E-06	1.26E-05	< LLD
CE-141	Ci	< LLD	< LLD	< LLD	< LLD
CE-144	Ci	< LLD	< LLD	< LLD	< LLD
Total for Period	Ci	5.06E-03	2.54E-03	5.28E-02	8.93E-03
XE-133M	Ci	5.76E-06	< LLD	< LLD	< LLD
XE-133	Ci	3.96E-04	3.75E-06	1.48E-05	< LLD
XE-135M	Ci	8.06E-07	< LLD	< LLD	< LLD
XE-135	Ci	2.62E-04	< LLD	1.18E-05	< LLD
Total for Period	Ci	6.65E-04	3.75E-06	2.66E-05	< LLD

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
LICENSEE: EXELON GENERATION COMPANY, LLC

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SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
LICENSEE: EXELON GENERATION COMPANY, LLC

Appendix B
Solid Waste and Irradiated Fuel Shipments

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
LICENSEE: EXELON GENERATION COMPANY, LLC

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SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

A. Solid waste shipped offsite for burial or disposal (not irradiated fuel) 01/01/2008 – 12/31/2008

1. Type of waste

Type of waste	Unit	12 Month Period	Estimated Error %
a. Spent resin, filters sludges, evaporator bottoms, etc	m ³	51.90	25%
	Ci	2.24E+03	
b. Dry compressible waste, contaminated equipment, etc.	m ³	58.80	25%
	Ci	8.68E+00	
c. Irradiated components, control rods, etc.	m ³	None	N/A
	Ci	None	
d. Other (Describe)	m ³	None	N/A
	Ci	None	

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

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

Isotope	Waste Class A Curies *	Percent Abundance	Waste Class B Curies *	Percent Abundance	Waste Class C Curies*	Percent Abundance
C-14	2.19E-01	0.16%	2.86E-03	0.10%	7.29E-01	0.03%
Mn-54	2.11E+01	15.06%	6.76E-02	2.44%	7.27E+01	3.46%
Fe-55	7.73E+01	55.21%	3.71E-01	13.42%	1.40E+03	66.55%
Co-58	1.48E+00	1.06%	0.00E+00	0.00%	6.23E-01	0.03%
Co-60	3.06E+01	21.85%	2.25E+00	81.34%	5.56E+02	26.43%
Ni-63	1.05E+00	0.75%	5.82E-02	2.10%	1.47E+01	0.70%
Zn-65	4.12E+00	2.94%	0.00E+00	0.00%	5.20E+01	2.47%
Cs-137	1.21E+00	0.86%	1.25E-02	0.46%	3.15E+00	0.15%
Cr-51	1.11E+00	0.78%	0.00E+00	0.00%	1.78E+00	0.08%
Fe-59	2.20E-03	0.01%	0.00E+00	0.00%	2.54E-01	0.01%
H-3	2.30E-01	0.16%	1.09E-03	0.03%	1.53E-01	0.01%
Pu-241	1.29E+00	0.92%	3.98E-04	0.01%	9.90E-01	0.05%
Sr-90	4.70E-02	0.03%	2.79E-03	0.10%	5.07E-01	0.02%
Ce-144	2.99E-01	0.21%	0.00E+00	0.00%	1.96E-01	0.01%
Totals	1.40E+02	100.00%	2.77E+00	100.00%	2.10E+03	100.00%

* Activity is estimated

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

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

Isotope	Waste Class A Curies *	Percent Abundance	Waste Class B Curies *	Percent Abundance
Cr-51	9.65E-01	11.26%	0.00E+00	0.00%
Mn-54	1.61E+00	18.79%	2.61E-03	2.44%
Fe-55	1.59E+00	18.55%	1.43E-02	13.38%
Co-58	1.75E-01	2.04%	0.00E+00	0.00%
Co-60	3.26E+00	38.04%	8.72E-02	81.60%
Fe-59	2.33E-01	2.72%	0.00E+00	0.00%
Zn-65	2.58E-01	3.01%	0.00E+00	0.00%
Ni-63	2.37E-01	2.77%	2.27E-03	2.12%
Cs-137	9.75E-02	1.14%	4.86E-04	0.46%
Nb-95	1.44E-01	1.68%	0.00E+00	0.00%
Totals	8.57E+00	100.00%	1.07E-01	100.00%

* Activity is estimated

3. Solid Waste (Disposition)

Number of Shipments	Mode of Transportation	Destination
15	Truck	Studsvik (THOR) to Barnwell
10	Truck	Studsvik (THOR) to Energy Solutions / Clive
35	Truck	Duratek to Energy Solutions / Clive
4	Truck	Limerick Gen. Sta. To Energy Solutions / Clive
1	Truck	Limerick Generating Station to Barnwell

Comments:

20 Shipments were made from Limerick to Duratek for processing
 7 Shipments were made from Limerick to Studsvik (THOR) for processing
 No solidifications were performed

Category A - 20 shipments Type A LSA
 Category A - 4 shipments > Type A LSA
 Category A - 5 shipments Type B
 Category B - 36 shipments Type A LSA
 Category C - No shipments made
 Category D - No shipments made

B. Irradiated Fuel Shipments (disposition)

Number of Shipments	Mode of Transportation	Destination
0	N/A	N/A

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
LICENSEE: EXELON GENERATION COMPANY, LLC

C. Changes to the Process Control Program

Revision 6 to procedure RW-AA-100, "Process Control Program For Radioactive Waste" was implemented in 2008. Step 4.2.10 was changed to specify the documentation required for High Integrity Containers (HIC) at the burial site. The revision did not make any changes to the Process Control Program at Limerick.

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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Appendix C
Radiological Impact to Man

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
LICENSEE: EXELON GENERATION COMPANY, LLC

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SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Per ODCM Control 6.2, the Annual Radioactive Effluent Release Report shall include an assessment of the radiation doses to the hypothetically highest exposed MEMBER OF THE PUBLIC from reactor releases and other nearby uranium fuel cycle sources. For purposes of this calculation the following assumptions were made:

Gaseous

- Annual average meteorology and actual gaseous effluent releases were used.
- Beta air dose attributed to noble gas releases.
- The sector with the highest x/Q, x/Q depleted and D/Q was the SE sector at Site Boundary 762 meters.
- All significant pathways were assumed to be present
- Occupancy factor was considered 100%.

Liquid

- Average river flow rate for the year (2.910E+03 cfs) was used.

A summary of gaseous and liquid radiation doses to members of the public at these locations 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	8.55E-03	All	762	SE	4.28E-02	20	mRad
Noble Gas	Beta – Air Dose	5.22E-03	All	762	SE	1.31E-02	40	mRad
Noble Gas	Total Body (Gamma)	5.32E-03	All	762	SE	5.32E-02	10	mrem
Noble Gas	Skin (Beta)	9.93E-03	All	762	SE	3.31E-02	30	mrem
Iodine, Particulate & Tritium	GI-LLI	5.87E-03	Child	762	SE	1.96E-02	30	mrem
Liquid	Total Body	7.11E-03	Adult	LGS Outfall		1.19E-01	6	mrem
Liquid	Liver	1.02E-02	Teen	LGS Outfall		5.10E-02	20	mrem

Doses calculated were well below all ODCM and 40 CFR Part 190 limits of 25 mrem to a real individual.

The ODCM does not require population doses to be calculated.

ODCM Control 6.2 also requires that the Annual Effluent Release Report shall include an assessment of the radiation doses from radioactive liquid and gaseous effluents to members of the public due to activities inside the Site Boundary during the report period. ODCM Controls state that MEMBER OF THE PUBLIC shall include all persons not occupationally associated with the plant. This category does not include employees of the utility or contractors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational education, or other purposes not associated with the plant. Areas within the site boundary, where radiation dose of this type could occur include the Limerick Information Center on Longview Road near the rear exit of the plant, Frick's Lock on the west shore of the Schuylkill River and the railroad tracks that runs along the east shore of the River. The dose to State Police and National Guard personnel around the location of the Security Checkpoint was also included in this report. The radiation doses to Members of the Public have been estimated using methodology stated in the ODCM. The maximum gaseous dose to members of the public at these locations is based on the following assumptions:

- Annual average meteorology and actual effluent releases were used.
- Beta air dose attributed to noble gas releases.
- Dose is from ground plane and inhalation only. No ingestion dose.
- Adult age group was used for the State Police and National Guard Dose.

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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- The calculated annual average x/Q, x/Q depleted and D/Q for the highest exposed sector for the railroad tracks (W), and the sectors encompassing the Security Checkpoint, Frick's Lock and the Information Center were used.
- The maximum expected occupancy factor is 25% of a working year at all locations.
- Distance to the railroad tracks, which pass through the Site Boundary in the W sector, is approximately 225 meters.
- Distance to the Limerick Information Center is approximately 884 meters in the ESE sector.
- Distance to Frick's Lock is approximately 450 meters in the WSW sector.
- Distance to Security Checkpoint is approximately 682 meters in the NNE sector.

A summary of gaseous radiation doses to members of the public at these locations is as follows:

Location	Sector	Approx. Distance (meters)	GAMMA AIR DOSE, MRAD ⁽¹⁾	Beta Air Dose, MRAD ⁽²⁾	Iodine/Part/H3 Organ Dose, MREM ⁽³⁾
Frick's Lock	WSW	450	7.04E-04	4.30E-04	1.10E-04
Info. Center	ESE	884	9.59E-04	5.85E-04	1.63E-04
R.R. Tracks	W	225	4.14E-03	2.53E-03	6.50E-04
National Guard / Security Check Point	NNE	682	6.34E-04	3.87E-04	1.04E-04

Notes:

- (1) The limit for Gamma Air Dose = 20 mRad/Yr (ref. ODCM 3.2.2.2.b)
- (2) The limit for Beta Air Dose = 40 mRad/Yr (ref. ODCM 3.2.2.2.b)
- (3) The limit for Iodine/Particulate/H-3 Organ Dose = 30 mrem/Yr (ref. ODCM 3.2.2.3.b)

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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Appendix D
Meteorological Data

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 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	0	0	0	0	0	0
NE	0	2	0	0	0	0	2
ENE	0	0	0	0	0	0	0
E	0	1	0	0	0	0	1
ESE	0	2	0	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	1	0	0	0	0	1
S	0	3	4	0	0	0	7
SSW	0	5	8	0	0	0	13
SW	0	0	3	0	0	0	3
WSW	0	4	0	0	0	0	4
W	0	0	7	3	0	0	10
WNW	1	4	7	6	0	0	18
NW	0	5	6	4	0	0	15
NNW	0	2	8	1	0	0	11
Variable	0	0	0	0	0	0	0
Total	1	29	44	14	0	0	88

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

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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	1	0	0	3
NNE	1	2	0	0	0	0	3
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	1	3	0	0	0	4
ESE	0	1	3	0	0	0	4
SE	0	0	0	0	0	0	0
SSE	0	1	0	0	0	0	1
S	0	0	1	0	0	0	1
SSW	0	2	0	0	0	0	2
SW	0	1	1	0	0	0	2
WSW	0	3	0	0	0	0	3
W	2	2	6	2	0	0	12
WNW	0	5	6	4	0	0	15
NW	0	8	9	16	1	0	34
NNW	0	3	5	1	1	0	10
Variable	0	0	0	0	0	0	0
Total	3	31	35	24	2	0	95

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

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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	2	1	0	0	0	5
NNE	1	0	0	0	0	0	1
NE	0	1	0	0	0	0	1
ENE	0	1	0	0	0	0	1
E	1	3	2	0	0	0	6
ESE	0	2	1	0	0	0	3
SE	1	2	0	0	0	0	3
SSE	1	1	1	0	0	0	3
S	0	2	0	0	0	0	2
SSW	0	0	1	1	0	0	2
SW	0	1	0	0	0	0	1
WSW	1	3	0	0	0	0	4
W	0	3	5	2	0	0	10
WNW	0	11	6	3	0	0	20
NW	0	5	16	19	5	0	45
NNW	1	1	5	1	0	0	8
Variable	0	0	0	0	0	0	0
Total	8	38	38	26	5	0	115

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: 6

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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	16	16	7	1	0	0	40
NNE	21	6	0	0	0	0	27
NE	22	4	0	0	0	0	26
ENE	20	24	1	0	0	0	45
E	15	41	22	0	0	0	78
ESE	7	15	7	0	0	0	29
SE	4	14	5	0	0	0	23
SSE	6	7	2	0	0	0	15
S	2	7	5	0	0	0	14
SSW	3	11	7	0	0	0	21
SW	3	8	2	0	0	0	13
WSW	7	8	0	0	0	0	15
W	3	13	23	11	1	0	51
WNW	17	23	70	20	0	0	130
NW	12	69	114	78	17	0	290
NNW	11	22	45	19	0	0	97
Variable	0	0	0	0	0	0	0
Total	169	288	310	129	18	0	914

Hours of calm in this stability class: 5
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 6

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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	11	14	3	0	0	0	28
NNE	9	14	1	0	0	0	24
NE	11	6	0	0	0	0	17
ENE	11	7	0	0	0	0	18
E	15	27	10	0	0	0	52
ESE	4	8	3	0	0	0	15
SE	10	13	1	0	0	0	24
SSE	3	14	7	2	0	0	26
S	7	26	16	0	0	0	49
SSW	11	12	25	0	0	0	48
SW	11	9	4	2	0	0	26
WSW	29	8	3	1	0	0	41
W	24	30	10	4	0	0	68
WNW	32	60	9	0	0	0	101
NW	14	48	10	4	0	0	76
NNW	15	17	2	1	0	0	35
Variable	0	0	0	0	0	0	0
Total	217	313	104	14	0	0	648

Hours of calm in this stability class: 12
 Hours of missing wind measurements in this stability class: 3
 Hours of missing stability measurements in all stability classes: 6

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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	13	1	0	0	0	0	14
NNE	4	0	0	0	0	0	4
NE	9	0	0	0	0	0	9
ENE	6	0	0	0	0	0	6
E	8	3	0	0	0	0	11
ESE	10	1	0	0	0	0	11
SE	5	0	1	0	0	0	6
SSE	6	2	0	0	0	0	8
S	3	6	0	0	0	0	9
SSW	3	2	0	0	0	0	5
SW	9	1	0	0	0	0	10
WSW	9	1	0	0	0	0	10
W	11	2	0	0	0	0	13
WNW	18	4	0	0	0	0	22
NW	18	1	0	0	0	0	19
NNW	10	2	1	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	142	26	2	0	0	0	170

Hours of calm in this stability class: 13
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 6

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Table D - 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	9	0	0	0	0	0	9
NNE	3	0	0	0	0	0	3
NE	4	0	0	0	0	0	4
ENE	1	0	0	0	0	0	1
E	3	0	0	0	0	0	3
ESE	4	0	0	0	0	0	4
SE	7	2	0	0	0	0	9
SSE	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0
SSW	4	0	0	0	0	0	4
SW	2	0	0	0	0	0	2
WSW	6	0	0	0	0	0	6
W	9	0	0	0	0	0	9
WNW	16	0	0	0	0	0	16
NW	8	1	0	0	0	0	9
NNW	14	0	0	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	91	3	0	0	0	0	94

Hours of calm in this stability class: 17
 Hours of missing wind measurements in this stability class: 2
 Hours of missing stability measurements in all stability classes: 6

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 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	2	0	0	0	0	2
ENE	0	0	0	0	0	0	0
E	0	1	1	0	0	0	2
ESE	0	0	1	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	1	1	0	0	0	2
S	0	2	4	2	0	0	8
SSW	0	1	6	6	1	0	14
SW	0	1	1	0	0	0	2
WSW	0	0	2	3	2	1	8
W	0	0	2	5	2	3	12
WNW	1	3	8	5	5	0	22
NW	0	0	3	0	1	0	4
NNW	0	2	3	6	0	0	11
Variable	0	0	0	0	0	0	0
Total	1	13	32	27	11	4	88

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

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	1	0	0	3
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	0	3	1	0	0	4
ESE	0	0	2	1	0	0	3
SE	0	1	1	0	0	0	2
SSE	0	0	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	2	1	0	0	0	3
SW	0	0	0	0	1	0	1
WSW	0	4	1	1	1	0	7
W	1	2	3	5	6	1	18
WNW	0	3	6	8	8	2	27
NW	0	1	7	2	5	1	16
NNW	0	3	3	2	0	0	8
Variable	0	0	0	0	0	0	0
Total	1	19	29	21	21	4	95

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

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January - March, 2008

Period of Record: January - March 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	1	0	0	0	4
NNE	0	0	0	0	0	0	0
NE	0	1	0	0	0	0	1
ENE	1	3	1	0	0	0	5
E	0	1	1	1	0	0	3
ESE	0	3	0	1	0	0	4
SE	0	0	2	0	0	0	2
SSE	0	0	2	1	0	0	3
S	1	1	0	0	0	0	2
SSW	0	1	1	0	1	0	3
SW	0	3	0	0	0	0	3
WSW	0	1	3	2	1	0	7
W	0	2	5	3	4	2	16
WNW	1	3	8	5	10	2	29
NW	0	3	5	10	7	3	28
NNW	1	1	2	2	0	0	6
Variable	0	0	0	0	0	0	0
Total	5	25	31	25	23	7	116

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

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various
 Stability Classes for the Limerick Generating Station,
 January - March, 2008

Period of Record: January - March 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	5	16	5	5	0	0	31
NNE	12	19	0	0	0	0	31
NE	11	16	1	0	0	0	28
ENE	8	24	21	2	0	0	55
E	8	30	29	7	0	0	74
ESE	2	10	12	3	0	0	27
SE	3	3	15	3	0	0	24
SSE	1	9	6	2	0	0	18
S	3	5	5	7	0	0	20
SSW	1	1	10	5	1	0	18
SW	1	6	6	3	0	0	16
WSW	3	6	6	4	0	1	20
W	3	10	9	35	24	12	93
WNW	5	14	48	89	44	16	216
NW	8	22	41	57	23	7	158
NNW	5	13	33	29	7	0	87
Variable	0	0	0	0	0	0	0
Total	79	204	247	251	99	36	916

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: 6

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various
 Stability Classes for the Limerick Generating Station,
 January - March, 2008

Period of Record: January - March 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	9	17	2	0	0	31
NNE	1	6	7	2	0	0	16
NE	4	5	1	0	0	0	10
ENE	4	17	6	0	0	0	27
E	4	16	23	9	0	0	52
ESE	2	7	6	1	0	0	16
SE	1	13	7	3	0	0	24
SSE	1	4	8	7	1	1	22
S	2	12	27	21	7	0	69
SSW	2	9	13	12	7	1	44
SW	3	18	11	3	5	2	42
WSW	1	14	12	3	2	2	34
W	2	17	31	17	2	0	69
WNW	3	33	57	12	0	2	107
NW	3	11	41	7	1	0	63
NNW	3	12	12	2	0	0	29
Variable	0	0	0	0	0	0	0
Total	39	203	279	101	25	8	655

Hours of calm in this stability class: 1
 Hours of missing wind measurements in this stability class: 7
 Hours of missing stability measurements in all stability classes: 6

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station; January - March, 2008

Period of Record: January - March 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	6	1	0	0	0	10
NNE	3	2	4	0	0	0	9
NE	3	2	0	0	0	0	5
ENE	3	3	0	0	0	0	6
E	2	6	2	0	0	0	10
ESE	2	4	0	0	0	0	6
SE	1	4	0	0	0	0	5
SSE	6	6	1	1	0	0	14
S	1	8	3	0	0	0	12
SSW	5	7	6	0	0	0	18
SW	3	5	4	1	0	0	13
WSW	0	7	2	2	0	0	11
W	3	8	5	0	0	0	16
WNW	2	10	5	0	0	0	17
NW	1	13	4	0	0	0	18
NNW	4	6	3	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	42	97	40	4	0	0	183

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

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Table D - 2 Wind Speed by Direction Measured at 175 Feet for Various
 Stability Classes for the Limerick Generating Station,
 January - March, 2008

Period of Record: January - March 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	6	0	0	0	0	9
NNE	4	6	1	0	0	0	11
NE	1	3	0	0	0	0	4
ENE	2	2	0	0	0	0	4
E	2	0	0	0	0	0	2
ESE	1	1	0	0	0	0	2
SE	1	2	1	0	0	0	4
SSE	2	0	0	1	0	0	3
S	3	4	0	0	0	0	7
SSW	2	5	0	0	0	0	7
SW	3	3	2	0	0	0	8
WSW	5	8	2	0	0	0	15
W	2	5	0	0	0	0	7
WNW	6	6	1	0	0	0	13
NW	4	4	2	0	0	0	10
NNW	3	2	1	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	44	57	10	1	0	0	112

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

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Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various
 Stability Classes for the Limerick Generating Station,
 April - June, 2008

Period of Record: April - June 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	8	0	0	0	10
NNE	0	0	3	0	0	0	3
NE	0	0	0	0	0	0	0
ENE	0	0	2	0	0	0	2
E	0	1	1	2	0	0	4
ESE	0	1	3	2	0	0	6
SE	0	0	0	0	0	0	0
SSE	0	2	2	0	0	0	4
S	1	6	1	0	0	0	8
SSW	1	7	3	0	0	0	11
SW	0	4	0	0	0	0	4
WSW	0	7	1	0	0	0	8
W	0	2	3	0	0	0	5
WNW	2	6	8	0	0	0	16
NW	1	8	12	3	0	0	24
NNW	1	3	11	0	0	0	15
Variable	0	0	0	0	0	0	0
Total	6	49	58	7	0	0	120

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: 1

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Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various
 Stability Classes for the Limerick Generating Station,
 April - June, 2008

Period of Record: April - June 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	6	0	0	0	6
NNE	0	1	0	0	0	0	1
NE	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	5	1	0	0	0	6
ESE	0	2	3	1	0	0	6
SE	0	2	0	0	0	0	2
SSE	0	1	0	0	0	0	1
S	1	0	1	0	0	0	2
SSW	0	3	5	0	0	0	8
SW	0	3	1	0	0	0	4
WSW	0	1	0	0	0	0	1
W	1	1	0	0	0	0	2
WNW	0	5	2	1	0	0	8
NW	3	4	16	2	0	0	25
NNW	1	0	4	4	0	0	9
Variable	0	0	0	0	0	0	0
Total	7	28	39	8	0	0	82

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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 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	0	2	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	0	1	3	0	0	0	4
E	0	8	7	4	0	0	19
ESE	0	5	4	0	0	0	9
SE	1	3	0	0	0	0	4
SSE	0	1	0	0	0	0	1
S	1	1	0	0	0	0	2
SSW	0	1	4	0	0	0	5
SW	1	3	3	0	0	0	7
WSW	0	3	1	0	0	0	4
W	2	4	2	0	0	0	8
WNW	2	5	5	0	0	0	12
NW	0	5	11	2	0	0	18
NNW	0	1	1	2	0	0	4
Variable	0	0	0	0	0	0	0
Total	7	43	46	8	0	0	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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	5	15	19	0	0	0	39
NNE	9	14	3	0	0	0	26
NE	17	16	1	0	0	0	34
ENE	20	26	14	5	0	0	65
E	3	50	53	8	0	0	114
ESE	6	14	10	6	0	0	36
SE	5	5	0	0	0	0	10
SSE	8	7	1	0	0	0	16
S	6	14	5	0	0	0	25
SSW	9	27	15	1	0	0	52
SW	6	36	2	1	0	0	45
WSW	12	36	1	0	0	0	49
W	11	37	2	0	0	0	50
WNW	12	39	9	0	0	0	60
NW	14	49	41	13	3	0	120
NNW	5	23	23	4	0	0	55
Variable	0	0	0	0	0	0	0
Total	148	408	199	38	3	0	796

Hours of calm in this stability class: 7
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	7	20	17	0	0	0	44
NNE	8	7	0	0	0	0	15
NE	13	4	1	0	0	0	18
ENE	15	17	6	3	0	0	41
E	8	15	8	0	0	0	31
ESE	3	7	7	0	0	0	17
SE	6	6	0	0	0	0	12
SSE	6	10	1	0	0	0	17
S	6	25	4	0	0	0	35
SSW	6	19	10	1	0	0	36
SW	21	11	1	0	0	0	33
WSW	18	15	0	0	0	0	33
W	27	19	2	0	0	0	48
WNW	30	34	0	2	0	0	66
NW	24	36	16	0	0	0	76
NNW	14	8	7	0	0	0	29
Variable	0	0	0	0	0	0	0
Total	212	253	80	6	0	0	551

Hours of calm in this stability class: 13
 Hours of missing wind measurements in this stability class: 4
 Hours of missing stability measurements in all stability classes: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	9	0	0	0	0	0	9
NNE	2	2	0	0	0	0	4
NE	8	0	0	0	0	0	8
ENE	6	0	0	0	0	0	6
E	0	1	0	0	0	0	1
ESE	1	1	1	0	0	0	3
SE	3	1	0	0	0	0	4
SSE	1	2	0	0	0	0	3
S	4	9	0	0	0	0	13
SSW	6	5	0	0	0	0	11
SW	15	3	0	0	0	0	18
WSW	15	0	0	0	0	0	15
W	29	0	0	0	0	0	29
WNW	32	2	0	0	0	0	34
NW	25	3	0	0	0	0	28
NNW	16	2	0	0	0	0	18
Variable	0	0	0	0	0	0	0
Total	172	31	1	0	0	0	204

Hours of calm in this stability class: 28
 Hours of missing wind measurements in this stability class: 7
 Hours of missing stability measurements in all stability classes: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 3 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	11	1	0	0	0	0	12
NNE	6	0	0	0	0	0	6
NE	6	1	0	0	0	0	7
ENE	2	0	0	0	0	0	2
E	5	1	0	0	0	0	6
ESE	4	0	0	0	0	0	4
SE	4	0	0	0	0	0	4
SSE	2	0	0	0	0	0	2
S	7	5	0	0	0	0	12
SSW	10	7	0	0	0	0	17
SW	18	0	0	0	0	0	18
WSW	13	0	0	0	0	0	13
W	14	0	0	0	0	0	14
WNW	34	0	0	0	0	0	34
NW	26	3	0	0	0	0	29
NNW	11	1	0	0	0	0	12
Variable	0	0	0	0	0	0	0
Total	173	19	0	0	0	0	192

Hours of calm in this stability class: 63
 Hours of missing wind measurements in this stability class: 12
 Hours of missing stability measurements in all stability classes: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	8	2	0	0	10
NNE	0	0	2	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	0	1	0	4	0	0	5
E	0	0	0	2	0	0	2
ESE	0	1	1	1	2	0	5
SE	0	0	0	0	0	0	0
SSE	0	0	3	1	0	0	4
S	1	5	6	0	0	0	12
SSW	0	2	5	1	0	0	8
SW	0	2	3	0	0	0	5
WSW	0	1	3	5	0	0	9
W	0	0	5	5	3	0	13
WNW	1	4	7	7	1	0	20
NW	1	3	6	5	1	0	16
NNW	0	1	4	4	0	0	9
Variable	0	0	0	0	0	0	0
Total	3	20	53	37	7	0	120

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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4 Wind Speed by Direction Measured at 175 Feet for Various
 Stability Classes for the Limerick Generating Station,
 April - June, 2008

Period of Record: April - June 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	4	1	0	0	5
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	1	6	0	0	0	7
ESE	0	1	3	0	1	0	5
SE	0	0	2	0	0	0	2
SSE	0	1	0	0	0	0	1
S	0	0	1	2	0	0	3
SSW	0	1	4	2	0	0	7
SW	0	2	1	1	0	0	4
WSW	0	0	2	0	0	0	2
W	1	2	0	2	0	0	5
WNW	0	3	10	6	1	0	20
NW	2	1	2	6	3	0	14
NNW	0	1	2	3	0	0	6
Variable	0	0	0	0	0	0	0
Total	3	14	37	23	5	0	82

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: 1

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4: Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 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	0	1	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	2	4	1	0	0	7
E	0	6	4	7	1	0	18
ESE	0	3	5	0	0	0	8
SE	0	2	0	0	0	0	2
SSE	0	1	0	0	0	0	1
S	1	2	0	0	0	0	3
SSW	1	1	1	4	1	0	8
SW	0	0	3	0	2	0	5
WSW	0	1	3	2	0	0	6
W	2	1	3	2	3	0	11
WNW	1	0	6	10	1	0	18
NW	1	1	2	3	1	0	8
NNW	0	0	1	1	1	0	3
Variable	0	0	0	0	0	0	0
Total	6	22	36	30	10	0	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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	12	19	7	0	0	40
NNE	5	7	9	3	0	0	24
NE	4	21	10	1	5	0	41
ENE	3	24	36	15	0	0	78
E	3	17	44	33	6	0	103
ESE	2	11	11	3	2	0	29
SE	4	5	3	0	0	0	12
SSE	2	3	4	1	0	0	10
S	3	10	18	7	0	0	38
SSW	2	14	20	13	4	0	53
SW	2	15	29	4	0	0	50
WSW	5	19	24	12	0	0	60
W	7	18	34	15	1	0	75
WNW	2	23	30	17	0	4	76
NW	6	15	26	26	4	0	77
NNW	1	6	19	11	0	0	37
Variable	0	0	0	0	0	0	0
Total	53	220	336	168	22	4	803

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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	10	19	10	0	0	40
NNE	3	9	4	1	0	0	17
NE	5	9	7	2	1	0	24
ENE	4	13	12	4	2	0	35
E	4	12	12	5	0	0	33
ESE	3	6	4	6	0	0	19
SE	1	4	7	1	0	0	13
SSE	3	2	8	3	0	0	16
S	2	9	26	8	1	0	46
SSW	0	10	11	13	3	0	37
SW	4	9	17	2	0	0	32
WSW	9	13	18	3	2	0	45
W	5	20	30	5	0	0	60
WNW	3	26	44	10	0	2	85
NW	4	10	23	6	0	0	43
NNW	2	4	13	4	0	0	23
Variable	0	0	0	0	0	0	0
Total	53	166	255	83	9	2	568

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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	3	7	0	0	0	11
NNE	2	3	3	0	0	0	8
NE	3	3	2	0	0	0	8
ENE	2	3	0	0	0	0	5
E	1	4	3	0	0	0	8
ESE	2	1	0	0	0	0	3
SE	2	2	0	1	0	0	5
SSE	0	2	2	0	0	0	4
S	1	5	5	0	0	0	11
SSW	1	9	9	1	0	0	20
SW	2	14	6	0	0	0	22
WSW	2	15	6	0	0	0	23
W	7	16	8	0	0	0	31
WNW	2	29	18	0	0	0	49
NW	4	12	7	0	0	0	23
NNW	1	3	3	0	0	0	7
Variable	0	0	0	0	0	0	0
Total	33	124	79	2	0	0	238

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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2008

Period of Record: April - June 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	3	7	6	0	0	0	16
NNE	2	2	0	0	0	0	4
NE	3	2	1	0	0	0	6
ENE	6	3	1	0	0	0	10
E	4	5	0	0	0	0	9
ESE	2	1	0	0	0	0	3
SE	4	0	0	0	0	0	4
SSE	0	3	3	0	0	0	6
S	4	4	5	0	0	0	13
SSW	2	6	10	0	0	0	18
SW	4	14	10	0	0	0	28
WSW	6	13	9	0	0	0	28
W	5	18	2	0	0	0	25
WNW	6	24	22	0	0	0	52
NW	1	19	9	0	0	0	29
NNW	2	11	3	0	0	0	16
Variable	0	0	0	0	0	0	0
Total	54	132	81	0	0	0	267

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: 1

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	1	0	0	0	5
NNE	0	4	0	0	0	0	4
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	1	0	0	0	0	1
SE	0	1	0	0	0	0	1
SSE	0	1	0	0	0	0	1
S	0	0	5	0	0	0	5
SSW	0	5	0	0	0	0	5
SW	0	14	1	0	0	0	15
WSW	0	14	0	0	0	0	14
W	0	15	0	0	0	0	15
WNW	2	9	0	0	0	0	11
NW	0	7	0	0	0	0	7
NNW	0	3	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	2	78	7	0	0	0	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: 31

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	5	2	0	0	0	7
NNE	0	5	0	0	0	0	5
NE	0	2	0	0	0	0	2
ENE	0	0	0	0	0	0	0
E	0	1	0	0	0	0	1
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	2	0	0	0	0	2
SW	0	8	1	0	0	0	9
WSW	4	9	0	0	0	0	13
W	2	7	0	0	0	0	9
WNW	2	6	2	0	0	0	10
NW	0	11	3	0	0	0	14
NNW	0	4	4	0	0	0	8
Variable	0	0	0	0	0	0	0
Total	8	60	12	0	0	0	80

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: 31

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various
 Stability Classes for the Limerick Generating Station,
 July - September, 2008

Period of Record: July - September 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	3	3	0	0	0	8
NNE	0	7	0	0	0	0	7
NE	0	4	0	0	0	0	4
ENE	1	5	0	0	0	0	6
E	0	7	2	0	0	0	9
ESE	0	2	0	0	0	0	2
SE	0	1	0	0	0	0	1
SSE	0	2	0	0	0	0	2
S	0	3	1	0	0	0	4
SSW	1	1	1	0	0	0	3
SW	1	5	4	0	0	0	10
WSW	1	13	0	0	0	0	14
W	3	8	0	0	0	0	11
WNW	2	6	1	0	0	0	9
NW	1	10	13	0	0	0	24
NNW	0	5	11	2	0	0	18
Variable	0	0	0	0	0	0	0
Total	12	82	36	2	0	0	132

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various
 Stability Classes for the Limerick Generating Station,
 July - September, 2008

Period of Record: July - September 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	12	7	4	0	0	0	23
NNE	7	12	2	0	0	0	21
NE	10	11	3	0	0	0	24
ENE	7	13	7	0	0	0	27
E	5	17	2	0	0	0	24
ESE	2	19	1	0	0	0	22
SE	3	5	0	0	0	0	8
SSE	8	4	0	0	0	0	12
S	6	14	7	0	0	0	27
SSW	17	26	1	0	0	0	44
SW	16	31	1	0	0	0	48
WSW	20	27	4	0	0	0	51
W	19	11	0	0	0	0	30
WNW	18	24	0	0	0	0	42
NW	19	52	35	1	0	0	107
NNW	15	31	22	0	0	0	68
Variable	0	0	0	0	0	0	0
Total	184	304	89	1	0	0	578

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	32	13	1	0	0	0	46
NNE	26	25	1	0	0	0	52
NE	19	16	6	0	0	0	41
ENE	16	24	0	0	0	0	40
E	16	24	0	0	0	0	40
ESE	12	4	3	0	0	0	19
SE	9	4	0	0	0	0	13
SSE	14	12	0	0	0	0	26
S	12	46	2	0	0	0	60
SSW	23	16	10	0	0	0	49
SW	15	3	1	0	0	0	19
WSW	28	12	1	0	0	0	41
W	29	2	0	0	0	0	31
WNW	56	11	1	0	0	0	68
NW	69	32	4	0	0	0	105
NNW	24	17	3	0	0	0	44
Variable	0	0	0	0	0	0	0
Total	400	261	33	0	0	0	694

Hours of calm in this stability class: 9
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	25	0	0	0	0	0	25
NNE	10	3	0	0	0	0	13
NE	12	3	0	0	0	0	15
ENE	6	0	0	0	0	0	6
E	4	3	0	0	0	0	7
ESE	6	1	0	0	0	0	7
SE	0	0	0	0	0	0	0
SSE	4	1	0	0	0	0	5
S	3	2	0	0	0	0	5
SSW	10	7	0	0	0	0	17
SW	15	2	0	0	0	0	17
WSW	11	1	0	0	0	0	12
W	24	1	0	0	0	0	25
WNW	58	4	0	0	0	0	62
NW	48	8	0	0	0	0	56
NNW	31	0	0	0	0	0	31
Variable	0	0	0	0	0	0	0
Total	267	36	0	0	0	0	303

Hours of calm in this stability class: 18
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	13	0	0	0	0	0	13
NNE	13	0	0	0	0	0	13
NE	9	0	0	0	0	0	9
ENE	10	0	0	0	0	0	10
E	7	0	0	0	0	0	7
ESE	2	0	0	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	1	0	0	0	0	0	1
S	2	1	0	0	0	0	3
SSW	7	2	0	0	0	0	9
SW	14	3	0	0	0	0	17
WSW	12	0	0	0	0	0	12
W	16	0	0	0	0	0	16
WNW	47	0	0	0	0	0	47
NW	55	0	0	0	0	0	55
NNW	44	0	0	0	0	0	44
Variable	0	0	0	0	0	0	0
Total	252	6	0	0	0	0	258

Hours of calm in this stability class: 15
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 31

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 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	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	1
SE	0	1	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	0	1	2	4	0	0	7
SSW	0	1	8	1	0	0	10
SW	0	1	10	1	0	0	12
WSW	0	3	13	3	0	0	19
W	0	2	11	0	0	0	13
WNW	0	8	4	0	0	0	12
NW	0	2	1	0	0	0	3
NNW	0	0	1	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	0	22	56	9	0	0	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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 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	5	0	0	0	0	5
NE	0	1	0	0	0	0	1
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	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	3	5	0	0	0	8
SW	0	4	2	1	0	0	7
WSW	0	11	5	0	0	0	16
W	0	6	3	1	0	0	10
WNW	0	5	7	2	1	0	15
NW	0	3	4	0	0	0	7
NNW	0	2	2	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	0	42	33	4	1	0	80

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various
 Stability Classes for the Limerick Generating Station,
 July - September, 2008

Period of Record: July - September 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	3	3	1	0	0	8
NNE	0	2	4	0	0	0	6
NE	0	3	3	0	0	0	6
ENE	0	1	4	0	0	0	5
E	0	3	5	0	0	0	8
ESE	0	1	1	0	0	0	2
SE	0	1	1	0	0	0	2
SSE	0	0	1	0	0	0	1
S	0	3	0	1	0	0	4
SSW	0	0	1	2	0	0	3
SW	0	5	5	3	0	0	13
WSW	0	6	7	1	0	0	14
W	2	8	5	0	0	0	15
WNW	1	6	6	3	0	0	16
NW	0	5	14	5	0	0	24
NNW	0	1	0	4	0	0	5
Variable	0	0	0	0	0	0	0
Total	4	48	60	20	0	0	132

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	9	3	10	2	0	0	24
NNE	7	8	8	0	0	0	23
NE	2	10	12	3	0	0	27
ENE	7	11	8	1	0	0	27
E	2	8	9	0	0	0	19
ESE	0	6	10	1	0	0	17
SE	3	6	6	0	0	0	15
SSE	3	11	4	0	0	0	18
S	1	9	11	10	0	0	31
SSW	7	13	19	0	0	0	39
SW	8	26	22	8	0	0	64
WSW	9	16	25	0	0	0	50
W	5	20	12	0	0	0	37
WNW	14	33	29	9	1	0	86
NW	8	17	44	10	0	0	79
NNW	6	6	9	1	0	0	22
Variable	0	0	0	0	0	0	0
Total	91	203	238	45	1	0	578

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	14	15	16	1	0	0	46
NNE	10	14	20	2	0	0	46
NE	13	9	17	4	0	0	43
ENE	5	25	18	0	0	0	48
E	4	8	16	2	0	0	30
ESE	11	5	7	1	0	0	24
SE	9	8	2	1	0	0	20
SSE	2	17	13	0	0	0	32
S	1	16	42	8	0	0	67
SSW	7	15	10	5	2	0	39
SW	2	14	18	2	0	0	36
WSW	5	21	10	2	0	0	38
W	8	19	7	2	0	0	36
WNW	8	61	31	5	0	0	105
NW	20	27	15	2	0	0	64
NNW	11	15	2	0	0	0	28
Variable	0	0	0	0	0	0	0
Total	130	289	244	37	2	0	702

Hours of calm in this stability class: 1
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	6	8	0	0	0	0	14
NNE	6	4	4	0	0	0	14
NE	2	3	5	0	0	0	10
ENE	6	2	0	0	0	0	8
E	4	3	1	0	0	0	8
ESE	3	5	1	1	0	0	10
SE	3	3	0	0	0	0	6
SSE	3	3	0	0	0	0	6
S	2	6	5	0	0	0	13
SSW	1	8	7	3	0	0	19
SW	2	13	7	1	0	0	23
WSW	5	13	6	0	0	0	24
W	3	14	4	0	0	0	21
WNW	8	44	25	0	0	0	77
NW	10	32	8	0	0	0	50
NNW	8	9	0	0	0	0	17
Variable	0	0	0	0	0	0	0
Total	72	170	73	5	0	0	320

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2008

Period of Record: July - September 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	4	0	0	0	0	8
NNE	2	4	1	0	0	0	7
NE	2	6	0	0	0	0	8
ENE	2	4	0	0	0	0	6
E	2	1	0	0	0	0	3
ESE	6	1	0	0	0	0	7
SE	1	2	0	0	0	0	3
SSE	1	2	0	0	0	0	3
S	2	1	1	0	0	0	4
SSW	5	11	8	1	0	0	25
SW	7	18	3	0	0	0	28
WSW	5	12	4	0	0	0	21
W	6	15	0	0	0	0	21
WNW	9	51	20	1	0	0	81
NW	3	19	6	0	0	0	28
NNW	4	15	1	0	0	0	20
Variable	0	0	0	0	0	0	0
Total	61	166	44	2	0	0	273

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: 31

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 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	1	0	0	0	1
NE	0	0	2	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	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	3	2	0	0	0	5
SSW	0	1	0	0	0	0	1
SW	0	1	0	0	0	0	1
WSW	0	6	0	0	0	0	6
W	1	1	2	0	0	0	4
WNW	0	5	4	1	0	0	10
NW	1	2	1	0	0	0	4
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	2	19	12	1	0	0	34

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: 5

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various
 Stability Classes for the Limerick Generating Station,
 October - December, 2008

Period of Record: October - December 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	0	0	0	1
NNE	0	2	5	0	0	0	7
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	1	0	0	0	0	0	1
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	1	0	0	0	0	0	1
SSW	0	4	2	0	0	0	6
SW	2	1	0	0	0	0	3
WSW	1	2	0	0	0	0	3
W	0	8	3	0	0	0	11
WNW	0	3	6	6	0	0	15
NW	1	2	6	1	0	0	10
NNW	0	3	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	6	27	22	7	0	0	62

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: 5

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	5	3	0	0	0	8
NNE	0	9	3	0	0	0	12
NE	1	2	0	0	0	0	3
ENE	1	0	0	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	2	0	0	0	0	2
SSE	0	0	0	0	0	0	0
S	0	2	1	0	0	0	3
SSW	0	4	1	0	0	0	5
SW	1	0	0	0	0	0	1
WSW	1	1	0	0	0	0	2
W	4	7	2	0	0	0	13
WNW	0	9	11	6	1	0	27
NW	2	11	10	9	2	1	35
NNW	0	2	2	2	0	0	6
Variable	0	0	0	0	0	0	0
Total	10	54	33	17	3	1	118

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: 5

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	14	28	11	0	0	0	53
NNE	9	38	17	0	0	0	64
NE	14	20	1	0	0	0	35
ENE	13	20	2	0	0	0	35
E	10	9	3	0	0	0	22
ESE	4	10	1	0	0	0	15
SE	9	3	3	0	0	0	15
SSE	5	17	4	0	0	0	26
S	9	24	3	0	0	0	36
SSW	12	15	11	3	0	0	41
SW	14	3	3	0	0	0	20
WSW	7	8	3	0	0	0	18
W	12	38	19	8	0	0	77
WNW	21	52	40	14	1	0	128
NW	17	46	91	44	10	1	209
NNW	11	15	7	9	0	0	42
Variable	0	0	0	0	0	0	0
Total	181	346	219	78	11	1	836

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: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	18	11	1	0	0	0	30
NNE	18	18	8	0	0	0	44
NE	8	8	5	0	0	0	21
ENE	17	15	2	0	0	0	34
E	3	9	2	0	0	0	14
ESE	4	5	3	0	0	0	12
SE	9	3	8	0	0	0	20
SSE	9	12	5	1	0	0	27
S	12	26	13	3	0	0	54
SSW	16	20	9	0	0	0	45
SW	22	8	5	1	0	0	36
WSW	31	19	2	0	0	0	52
W	40	35	18	1	0	0	94
WNW	49	51	15	7	0	0	122
NW	19	32	14	4	0	0	69
NNW	14	6	0	0	0	0	20
Variable	0	0	0	0	0	0	0
Total	289	278	110	17	0	0	694

Hours of calm in this stability class: 6
 Hours of missing wind measurements in this stability class: 2
 Hours of missing stability measurements in all stability classes: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	11	2	0	0	0	0	13
NNE	7	5	0	0	0	0	12
NE	3	0	0	0	0	0	3
ENE	5	0	0	0	0	0	5
E	1	1	0	0	0	0	2
ESE	6	4	0	0	0	0	10
SE	2	1	0	0	0	0	3
SSE	3	1	0	0	0	0	4
S	3	3	0	0	0	0	6
SSW	4	8	0	0	0	0	12
SW	6	6	1	0	0	0	13
WSW	19	1	0	0	0	0	20
W	29	5	0	0	0	0	34
WNW	36	6	0	0	0	0	42
NW	20	2	0	0	0	0	22
NNW	14	0	0	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	169	45	1	0	0	0	215

Hours of calm in this stability class: 4
 Hours of missing wind measurements in this stability class: 1
 Hours of missing stability measurements in all stability classes: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	21	0	0	0	0	0	21
NNE	10	0	0	0	0	0	10
NE	12	0	0	0	0	0	12
ENE	7	0	0	0	0	0	7
E	4	0	0	0	0	0	4
ESE	3	0	0	0	0	0	3
SE	7	0	0	0	0	0	7
SSE	3	1	0	0	0	0	4
S	4	0	0	0	0	0	4
SSW	6	0	0	0	0	0	6
SW	2	0	1	0	0	0	3
WSW	10	0	0	0	0	0	10
W	14	1	0	0	0	0	15
WNW	40	0	0	0	0	0	40
NW	40	0	0	0	0	0	40
NNW	26	0	0	0	0	0	26
Variable	0	0	0	0	0	0	0
Total	209	2	1	0	0	0	212

Hours of calm in this stability class: 18
 Hours of missing wind measurements in this stability class: 0
 Hours of missing stability measurements in all stability classes: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 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	2	0	0	0	2
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	1	0	0	0	1
S	0	0	2	2	0	0	4
SSW	0	0	1	0	0	0	1
SW	0	0	4	0	0	0	4
WSW	0	0	3	1	0	0	4
W	0	1	4	3	1	1	10
WNW	0	2	3	0	0	0	5
NW	0	1	0	1	0	0	2
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	4	21	7	1	1	34

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: 5

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	0	0	0	2
NNE	0	0	1	3	0	0	4
NE	0	1	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	1	0	0	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	1	1	0	0	0	2
SSW	0	1	4	1	0	0	6
SW	1	1	1	0	0	0	3
WSW	0	2	4	1	0	0	7
W	0	2	4	1	3	0	10
WNW	0	1	4	4	3	3	15
NW	0	1	4	1	0	0	6
NNW	1	2	1	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	3	13	25	11	6	3	61

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: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	1	1	0	0	6
NNE	0	2	3	1	0	0	6
NE	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	1	0	0	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	2	0	0	0	0	2
SSE	0	0	0	0	0	0	0
S	0	1	1	1	0	0	3
SSW	0	0	3	0	1	0	4
SW	0	2	0	0	0	0	2
WSW	1	3	2	0	0	0	6
W	0	4	7	5	5	1	22
WNW	1	6	5	5	3	4	24
NW	1	2	4	13	2	3	25
NNW	0	3	0	2	1	0	6
Variable	0	0	0	0	0	0	0
Total	4	30	26	28	12	8	108

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 10
 Hours of missing stability measurements in all stability classes: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	8	17	15	4	0	0	44
NNE	7	20	28	14	0	0	69
NE	8	9	10	0	0	0	27
ENE	3	10	6	0	0	0	19
E	4	8	8	0	0	0	20
ESE	4	6	2	0	0	0	12
SE	2	8	0	2	1	0	13
SSE	1	11	13	3	0	0	28
S	1	15	30	1	1	0	48
SSW	4	16	6	9	7	2	44
SW	4	8	3	1	0	0	16
WSW	4	4	11	8	1	0	28
W	7	17	32	24	15	4	99
WNW	1	19	45	47	23	12	147
NW	5	15	35	47	19	11	132
NNW	4	15	6	14	1	0	40
Variable	0	0	0	0	0	0	0
Total	67	198	250	174	68	29	786

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 51
 Hours of missing stability measurements in all stability classes: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	9	12	9	4	0	0	34
NNE	1	15	19	10	2	0	47
NE	8	5	4	1	0	0	18
ENE	7	11	13	1	0	0	32
E	3	3	16	1	0	0	23
ESE	3	2	4	3	0	0	12
SE	0	6	0	6	1	0	13
SSE	1	11	7	3	3	1	26
S	4	14	29	15	0	0	62
SSW	1	13	16	12	7	0	49
SW	6	22	18	4	1	1	52
WSW	4	16	30	3	2	0	55
W	4	14	34	17	10	2	81
WNW	4	45	59	14	7	7	136
NW	9	8	18	7	1	0	43
NNW	4	3	5	0	0	0	12
Variable	0	0	0	0	0	0	0
Total	68	200	281	101	34	11	695

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 7
 Hours of missing stability measurements in all stability classes: 5

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	5	2	2	1	0	0	10
NNE	0	4	6	1	0	0	11
NE	3	4	0	0	0	0	7
ENE	2	4	0	0	0	0	6
E	0	1	2	0	0	0	3
ESE	2	0	0	0	0	0	2
SE	1	1	1	0	0	0	3
SSE	0	3	2	0	0	0	5
S	0	6	4	0	0	0	10
SSW	1	2	7	1	0	0	11
SW	1	6	11	5	0	0	23
WSW	1	14	6	0	0	0	21
W	2	9	8	0	0	0	19
WNW	2	29	19	1	0	0	51
NW	3	10	11	1	0	0	25
NNW	9	4	0	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	32	99	79	10	0	0	220

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: 5

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2008

Period of Record: October - December 2008
 Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
 Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	6	8	1	0	0	0	15
NNE	2	1	0	0	0	0	3
NE	1	3	0	0	0	0	4
ENE	4	2	0	0	0	0	6
E	4	4	0	0	0	0	8
ESE	3	0	0	0	0	0	3
SE	7	2	0	0	0	0	9
SSE	1	5	2	0	0	0	8
S	4	5	3	0	0	0	12
SSW	4	4	2	0	1	0	11
SW	1	11	2	0	0	0	14
WSW	4	5	3	0	0	0	12
W	4	14	2	0	0	0	20
WNW	12	31	17	0	0	0	60
NW	5	20	6	0	0	0	31
NNW	4	8	1	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	66	123	39	0	1	0	229

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: 5

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 9 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January - December, 2008

Limerick Tower 1																	January-December, 2008								
30 ft. Wind Speed and Direction																	171Ft-26Ft Delta-T (F)								
SPEED CLASS	WIND DIRECTION CLASSES																STABILITY CLASSES								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.00	0.02					
9 SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.08	0.00	0.09		0.09						
- N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.35	0.00	0.38				0.38					
2 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
4 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		0.50
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00						
T SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01			0.01					
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01				0.01				
2 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00				
4 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.00			
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00		0.02
TOT	5.64	4.53	3.52	4.29	5.51	2.86	2.02	2.44	4.62	5.66	4.70	5.59	8.42	13.98	18.46	7.75	100.00	3.88	3.76	5.53	36.86	30.52	10.52	8.92	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.19	0.09	0.05	0.02	0.06	0.11	0.01	0.07	0.29	0.35	0.27	0.38	0.40	0.65	0.59	0.34	3.88	Extremely Unstable
0.20	0.19	0.04	0.02	0.14	0.12	0.02	0.02	0.05	0.21	0.21	0.24	0.40	0.57	0.98	0.35	3.76	Moderately Unstable
0.31	0.26	0.09	0.14	0.40	0.17	0.12	0.07	0.13	0.18	0.22	0.28	0.50	0.80	1.44	0.42	5.53	Slightly Unstable
1.83	1.63	1.40	2.03	2.81	1.20	0.66	0.81	1.20	1.86	1.49	1.57	2.45	4.25	8.57	3.09	36.86	Neutral
1.75	1.59	1.14	1.57	1.62	0.74	0.81	1.13	2.34	2.10	1.34	1.97	2.84	4.21	3.85	1.51	30.52	Slightly Stable
0.72	0.39	0.41	0.27	0.25	0.37	0.15	0.24	0.39	0.53	0.68	0.67	1.19	1.89	1.47	0.90	10.52	Moderately Stable
0.65	0.38	0.38	0.24	0.24	0.15	0.24	0.09	0.22	0.42	0.47	0.48	0.64	1.62	1.57	1.13	8.92	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
2.73	1.93	2.11	1.93	1.29	0.92	1.00	0.96	1.06	1.76	2.29	3.01	3.85	6.22	5.16	3.28	39.49	< 3.5 mph
1.81	2.05	1.18	1.83	2.69	1.24	0.80	1.18	2.69	2.50	1.95	2.38	2.97	4.53	5.43	2.02	37.25	3.6 - 7.5 mph
1.09	0.54	0.22	0.44	1.37	0.59	0.21	0.27	0.84	1.33	0.41	0.19	1.23	2.38	5.05	1.90	18.06	7.6 - 12.5 mph
0.02	0.00	0.00	0.09	0.17	0.11	0.00	0.04	0.04	0.07	0.05	0.01	0.37	0.83	2.36	0.54	4.68	12.6 - 18.5 mph
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.45	0.01	0.50	18.6 - 24.5 mph
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	> 24.5 mph

SITE: LIMERICK GENERATING STATION - UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D - 10 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January - December, 2008

Limerick Tower 1																	January-December, 2008								
175 ft. Wind Speed and Direction																	171Ft-26Ft Delta-T (F)								
SPEED CLASS	WIND DIRECTION CLASSES																STABILITY CLASSES								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.02	0.07	0.07	0.02	0.00	0.22	0.22							
1 MU	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.10	0.15	0.09	0.00	0.38		0.38						
9 SU	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.02	0.01	0.14	0.16	0.12	0.02	0.52			0.52						
- N	0.00	0.00	0.06	0.00	0.07	0.02	0.01	0.00	0.01	0.14	0.00	0.01	0.46	0.79	0.53	0.09	2.20				2.20				
2 SS	0.00	0.02	0.01	0.02	0.00	0.00	0.01	0.05	0.09	0.22	0.07	0.07	0.14	0.08	0.02	0.00	0.81					0.81			
4 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00			
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01							0.01		
																									4.14
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.06	0.06								
G MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.01	0.00	0.08		0.08							
T SU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.07	0.00	0.17			0.17						
N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.18	0.37	0.21	0.00	0.80				0.80					
2 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.03	0.02	0.02	0.13	0.00	0.24					0.24				
4 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00			
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00		
																									1.35
TOT	5.06	4.28	3.27	4.58	5.20	2.57	2.15	2.69	5.91	6.09	6.10	6.82	10.00	18.27	11.86	5.15	100.00	3.80	3.68	5.32	35.63	30.28	11.11	10.18	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.18	0.07	0.03	0.06	0.05	0.08	0.01	0.08	0.36	0.38	0.27	0.46	0.55	0.68	0.29	0.24	3.80	Extremely Unstable
0.18	0.13	0.02	0.02	0.13	0.10	0.05	0.02	0.06	0.28	0.17	0.37	0.50	0.89	0.50	0.25	3.68	Moderately Unstable
0.27	0.15	0.09	0.20	0.35	0.16	0.09	0.06	0.14	0.21	0.27	0.38	0.74	1.01	0.98	0.23	5.32	Slightly Unstable
1.61	1.70	1.42	2.07	2.50	0.98	0.74	0.86	1.58	1.78	1.69	1.83	3.51	6.07	5.15	2.15	35.63	Neutral
1.75	1.46	1.10	1.64	1.60	0.82	0.81	1.11	2.82	1.95	1.87	1.99	2.84	5.00	2.46	1.06	30.28	Slightly Stable
0.52	0.49	0.35	0.29	0.34	0.24	0.22	0.34	0.53	0.79	0.94	0.91	1.01	2.24	1.34	0.58	11.11	Moderately Stable
0.55	0.29	0.25	0.30	0.25	0.17	0.23	0.23	0.42	0.71	0.90	0.88	0.84	2.38	1.13	0.64	10.18	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	C A L M
0.97	0.77	0.86	0.80	0.59	0.57	0.50	0.31	0.43	0.53	0.62	0.80	0.91	1.07	1.14	0.84	11.72	< 3.5 mph
1.79	1.57	1.36	1.92	1.61	0.87	0.88	1.10	1.68	1.80	2.58	2.64	3.05	6.03	3.20	1.71	33.78	3.6 - 7.5 mph
1.81	1.48	0.86	1.51	2.14	0.82	0.55	0.95	2.67	2.24	2.30	2.57	3.12	6.29	4.02	1.50	34.84	7.6 - 12.5 mph
0.49	0.43	0.13	0.32	0.79	0.25	0.20	0.27	1.03	1.06	0.46	0.65	1.70	3.01	2.42	0.98	14.17	12.6 - 18.5 mph
0.00	0.02	0.07	0.02	0.08	0.06	0.02	0.05	0.10	0.42	0.10	0.13	0.91	1.25	0.79	0.12	4.14	18.6 - 24.5 mph
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03	0.03	0.05	0.30	0.62	0.29	0.00	1.35	> 24.5 mph

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D – 11 Annual x/Q, x/Q depleted and D/Q values for the North Stack, Limerick Generating Station, 2008

Limerick Generating Station
 x/Q, x/Q depleted and D/Q values

Stack ID	North Stack - Flow = 251200 cfm			X/Q (s/m ³)	X/Q (s/m ²)	
	Location	Direction	Range (m)	Undepleted	Depleted	
				No Decay	8.05d Decay	D/Q (1/m ²)
N	Site Boundary	N	884	2.00E-07	1.82E-07	1.67E-09
N	Inhalation	N	965	1.78E-07	1.61E-07	1.47E-09
N	Vegetation	N	2574	6.37E-08	5.69E-08	3.69E-10
N	Meat	N	3414	5.52E-08	5.00E-08	2.47E-10
N	Cow	N	7562	3.40E-08	3.13E-08	7.04E-11
N	RR-Inf-Lck-NG	NNE	682	3.35E-07	3.09E-07	3.30E-09
N	Site Boundary	NNE	793	2.71E-07	2.48E-07	2.67E-09
N	Inhalation	NNE	805	2.65E-07	2.43E-07	2.61E-09
N	Vegetation	NNE	805	2.65E-07	2.43E-07	2.61E-09
N	Meat	NNE	1585	1.09E-07	9.67E-08	1.06E-09
N	Site Boundary	NE	793	1.67E-07	1.53E-07	1.57E-09
N	Meat	NE	1097	1.08E-07	9.71E-08	1.05E-09
N	Inhalation	NE	1287	8.73E-08	7.84E-08	8.75E-10
N	Vegetation	NE	2414	5.12E-08	4.62E-08	3.97E-10
N	Site Boundary	ENE	793	1.71E-07	1.57E-07	1.54E-09
N	Inhalation	ENE	965	1.32E-07	1.20E-07	1.22E-09
N	Vegetation	ENE	2896	5.62E-08	5.18E-08	3.35E-10
N	Meat	ENE	3871	5.47E-08	5.11E-08	2.34E-10
N	Site Boundary	E	762	3.56E-07	3.26E-07	3.75E-09
N	Inhalation	E	965	2.58E-07	2.34E-07	2.68E-09
N	Vegetation	E	1770	1.23E-07	1.09E-07	1.19E-09
N	Meat	E	1890	1.16E-07	1.03E-07	1.08E-09
N	Site Boundary	ESE	762	6.23E-07	5.71E-07	6.70E-09
N	Inhalation	ESE	805	5.78E-07	5.28E-07	6.18E-09
N	RR-Inf-Lck-NG	ESE	884	5.07E-07	4.61E-07	5.38E-09
N	Cow	ESE	1770	2.10E-07	1.86E-07	2.02E-09
N	Goat	ESE	1770	2.10E-07	1.86E-07	2.02E-09
N	Vegetation	ESE	1931	1.93E-07	1.72E-07	1.78E-09
N	Meat	ESE	4511	1.26E-07	1.16E-07	5.11E-10
N	Site Boundary	SE	762	1.13E-06	1.04E-06	1.47E-08
N	Inhalation	SE	1609	4.08E-07	3.61E-07	4.81E-09
N	Vegetation	SE	1770	3.64E-07	3.22E-07	4.16E-09
N	Meat	SE	7241	1.11E-07	9.91E-08	4.54E-10
N	Site Boundary	SSE	1006	2.36E-07	2.13E-07	2.84E-09
N	Inhalation	SSE	1609	1.29E-07	1.14E-07	1.49E-09
N	Vegetation	SSE	1931	1.06E-07	9.43E-08	1.15E-09
N	Meat	SSE	7224	4.87E-08	4.48E-08	1.58E-10
N	Cow	SSE	7562	4.73E-08	4.35E-08	1.46E-10
N	RR-Inf-Lck-NG	S	300	8.74E-07	8.37E-07	7.22E-09

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D – 11 Annual x/Q, x/Q depleted and D/Q values for the North Stack, Limerick Generating Station, 2008

Limerick Generating Station						
x/Q, x/Q depleted and D/Q values						
Stack ID	North Stack – Flow = 251200 cfm			X/Q (s/m ³)		D/Q (1/m ²)
	Location	Direction	Range (m)	X/Q (s/m ³)		
				Undepleted No Decay	Depleted 8.05d Decay	
N	Site Boundary	S	762	2.00E-07	1.83E-07	1.96E-09
N	Inhalation	S	1287	1.00E-07	8.95E-08	1.00E-09
N	Vegetation	S	1931	6.62E-08	5.91E-08	6.17E-10
N	Meat	S	3018	5.36E-08	4.89E-08	3.47E-10
N	Cow	S	3701	5.06E-08	4.67E-08	2.65E-10
N	RR-Inf-Lck-NG	SSW	225	1.36E-06	1.31E-06	8.56E-09
N	Site Boundary	SSW	762	1.80E-07	1.65E-07	1.52E-09
N	Meat	SSW	1433	7.85E-08	7.00E-08	7.07E-10
N	Inhalation	SSW	1609	6.93E-08	6.17E-08	6.19E-10
N	Vegetation	SSW	2253	5.41E-08	4.85E-08	4.07E-10
N	Cow	SSW	2896	4.93E-08	4.49E-08	2.96E-10
N	RR-Inf-Lck-NG	SW	225	8.32E-07	8.03E-07	4.15E-09
N	Site Boundary	SW	884	8.80E-08	7.99E-08	6.21E-10
N	Inhalation	SW	965	7.80E-08	7.05E-08	5.59E-10
N	Vegetation	SW	965	7.80E-08	7.05E-08	5.59E-10
N	Meat	SW	2835	3.30E-08	3.03E-08	1.86E-10
N	Cow	SW	4827	3.22E-08	3.03E-08	9.56E-11
N	RR-Inf-Lck-NG	WSW	345	5.94E-07	5.66E-07	4.40E-09
N	RR-Inf-Lck-NG	WSW	450	3.72E-07	3.51E-07	2.98E-09
N	Site Boundary	WSW	854	1.45E-07	1.32E-07	1.17E-09
N	Inhalation	WSW	1287	8.36E-08	7.45E-08	7.16E-10
N	Vegetation	WSW	1287	8.36E-08	7.45E-08	7.16E-10
N	Meat	WSW	2134	5.32E-08	4.77E-08	4.10E-10
N	Cow	WSW	4505	4.47E-08	4.17E-08	1.60E-10
N	RR-Inf-Lck-NG	W	225	2.19E-06	2.11E-06	1.75E-08
N	Site Boundary	W	854	2.53E-07	2.30E-07	2.55E-09
N	Inhalation	W	965	2.14E-07	1.94E-07	2.14E-09
N	Vegetation	W	3540	6.21E-08	5.61E-08	3.93E-10
N	Meat	W	4084	5.69E-08	5.16E-08	3.21E-10
N	RR-Inf-Lck-NG	WNW	345	4.56E-07	4.34E-07	4.22E-09
N	Site Boundary	WNW	793	1.24E-07	1.14E-07	1.32E-09
N	Inhalation	WNW	1126	7.67E-08	6.90E-08	8.17E-10
N	Vegetation	WNW	1126	7.67E-08	6.90E-08	8.17E-10
N	RR-Inf-Lck-NG	NW	450	1.76E-07	1.66E-07	1.30E-09
N	Site Boundary	NW	762	7.97E-08	7.32E-08	6.20E-10
N	Inhalation	NW	2092	2.52E-08	2.25E-08	1.80E-10
N	Vegetation	NW	2574	2.30E-08	2.08E-08	1.38E-10
N	Meat	NW	6660	1.70E-08	1.59E-08	3.63E-11
N	Site Boundary	NNW	884	8.91E-08	8.11E-08	7.24E-10
N	Inhalation	NNW	1448	4.65E-08	4.13E-08	3.83E-10
N	Vegetation	NNW	1931	3.53E-08	3.14E-08	2.60E-10
N	Meat	NNW	6325	2.24E-08	2.09E-08	4.73E-11

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D – 12 Annual x/Q, x/Q depleted and D/Q values for the South Stack, Limerick Generating Station, 2008

Limerick Generating Station
 x/Q, x/Q depleted and D/Q values
 South Stack - Flow = 177200 cfm

Stack ID	Location	Direction	Range (m)	X/Q (s/m ³)	X/Q (s/m ²)		D/Q (1/m ²)
				Undepleted No Decay	Depleted 8.05d Decay		
S	Site Boundary	N	884	6.80E-08	6.23E-08	8.23E-10	
S	Inhalation	N	965	6.10E-08	5.56E-08	7.45E-10	
S	Vegetation	N	2574	3.54E-08	3.31E-08	2.48E-10	
S	Meat	N	3414	3.69E-08	3.51E-08	1.76E-10	
S	Cow	N	7562	2.93E-08	2.80E-08	5.51E-11	
S	RR-Inf-Lck-NG	NNE	682	1.10E-07	1.02E-07	1.58E-09	
S	Site Boundary	NNE	793	9.03E-08	8.33E-08	1.33E-09	
S	Inhalation	NNE	805	8.86E-08	8.17E-08	1.31E-09	
S	Vegetation	NNE	805	8.86E-08	8.17E-08	1.31E-09	
S	Meat	NNE	1585	4.32E-08	3.94E-08	6.78E-10	
S	Site Boundary	NE	793	4.37E-08	4.07E-08	8.76E-10	
S	Meat	NE	1097	3.10E-08	2.86E-08	6.61E-10	
S	Inhalation	NE	1287	2.70E-08	2.49E-08	5.86E-10	
S	Vegetation	NE	2414	2.65E-08	2.51E-08	3.10E-10	
S	Site Boundary	ENE	793	4.61E-08	4.29E-08	9.16E-10	
S	Inhalation	ENE	965	3.81E-08	3.53E-08	7.79E-10	
S	Vegetation	ENE	2896	3.59E-08	3.46E-08	2.81E-10	
S	Meat	ENE	3871	4.11E-08	3.98E-08	2.04E-10	
S	Site Boundary	E	762	1.15E-07	1.06E-07	1.76E-09	
S	Inhalation	E	965	8.65E-08	7.90E-08	1.36E-09	
S	Vegetation	E	1770	5.39E-08	4.96E-08	7.75E-10	
S	Meat	E	1890	5.36E-08	4.94E-08	7.20E-10	
S	Site Boundary	ESE	762	1.92E-07	1.77E-07	2.95E-09	
S	Inhalation	ESE	805	1.79E-07	1.65E-07	2.77E-09	
S	RR-Inf-Lck-NG	ESE	884	1.60E-07	1.46E-07	2.48E-09	
S	Cow	ESE	1770	8.92E-08	8.18E-08	1.25E-09	
S	Goat	ESE	1770	8.92E-08	8.18E-08	1.25E-09	
S	Vegetation	ESE	1931	8.81E-08	8.13E-08	1.13E-09	
S	Meat	ESE	4511	9.80E-08	9.39E-08	4.04E-10	
S	Site Boundary	SE	762	4.09E-07	3.76E-07	6.69E-09	
S	Inhalation	SE	1609	1.84E-07	1.67E-07	2.88E-09	
S	Vegetation	SE	1770	1.73E-07	1.58E-07	2.57E-09	
S	Meat	SE	7241	9.56E-08	8.95E-08	3.89E-10	
S	Site Boundary	SSE	1006	8.78E-08	8.00E-08	1.41E-09	
S	Inhalation	SSE	1609	5.83E-08	5.33E-08	9.37E-10	
S	Vegetation	SSE	1931	5.42E-08	4.99E-08	7.68E-10	
S	Meat	SSE	7224	4.28E-08	4.06E-08	1.39E-10	
S	Cow	SSE	7562	4.19E-08	3.97E-08	1.29E-10	

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
 LICENSEE: EXELON GENERATION COMPANY, LLC

Table D – 12 Annual x/Q, x/Q depleted and D/Q values for the South Stack, Limerick Generating Station, 2008

Limerick Generating Station
 x/Q, x/Q depleted and D/Q values
 South Stack - Flow = 177200 cfm

Stack ID	Location	Direction	Range (m)	X/Q (s/m ³)		D/Q (1/m ²)
				Undepleted No Decay	Depleted 8.05d Decay	
S	RR-Inf-Lck-NG	S	300	2.98E-07	2.85E-07	2.94E-09
S	Site Boundary	S	762	7.22E-08	6.66E-08	9.90E-10
S	Inhalation	S	1287	4.07E-08	3.70E-08	6.27E-10
S	Vegetation	S	1931	3.38E-08	3.12E-08	4.51E-10
S	Meat	S	3018	3.68E-08	3.50E-08	2.82E-10
S	Cow	S	3701	3.83E-08	3.66E-08	2.23E-10
S	RR-Inf-Lck-NG	SSW	225	4.19E-07	4.04E-07	3.10E-09
S	Site Boundary	SSW	762	5.86E-08	5.39E-08	7.00E-10
S	Meat	SSW	1433	2.95E-08	2.67E-08	4.43E-10
S	Inhalation	SSW	1609	2.78E-08	2.53E-08	4.08E-10
S	Vegetation	SSW	2253	2.84E-08	2.66E-08	2.97E-10
S	Cow	SSW	2896	3.15E-08	2.99E-08	2.29E-10
S	RR-Inf-Lck-NG	SW	225	1.97E-07	1.90E-07	1.34E-09
S	Site Boundary	SW	884	2.22E-08	2.02E-08	2.81E-10
S	Inhalation	SW	965	1.99E-08	1.81E-08	2.67E-10
S	Vegetation	SW	965	1.99E-08	1.81E-08	2.67E-10
S	Meat	SW	2835	1.98E-08	1.90E-08	1.47E-10
S	Cow	SW	4827	2.57E-08	2.49E-08	8.19E-11
S	RR-Inf-Lck-NG	WSW	345	1.63E-07	1.56E-07	1.52E-09
S	RR-Inf-Lck-NG	WSW	450	1.02E-07	9.65E-08	1.06E-09
S	Site Boundary	WSW	854	4.11E-08	3.75E-08	4.90E-10
S	Inhalation	WSW	1287	2.56E-08	2.31E-08	3.89E-10
S	Vegetation	WSW	1287	2.56E-08	2.31E-08	3.89E-10
S	Meat	WSW	2134	2.50E-08	2.34E-08	2.88E-10
S	Cow	WSW	4505	3.53E-08	3.41E-08	1.34E-10
S	RR-Inf-Lck-NG	W	225	7.61E-07	7.35E-07	6.46E-09
S	Site Boundary	W	854	9.23E-08	8.44E-08	1.17E-09
S	Inhalation	W	965	7.95E-08	7.22E-08	1.03E-09
S	Vegetation	W	3540	4.51E-08	4.26E-08	3.18E-10
S	Meat	W	4084	4.36E-08	4.12E-08	2.67E-10
S	RR-Inf-Lck-NG	WNW	345	1.47E-07	1.40E-07	1.81E-09
S	Site Boundary	WNW	793	4.35E-08	4.01E-08	7.11E-10
S	Site Boundary	NNW	884	2.96E-08	2.70E-08	3.50E-10
S	Inhalation	WNW	1126	2.91E-08	2.65E-08	4.96E-10
S	Vegetation	WNW	1126	2.91E-08	2.65E-08	4.96E-10
S	Inhalation	NNW	1448	1.70E-08	1.53E-08	2.28E-10
S	Vegetation	NNW	1931	1.57E-08	1.44E-08	1.70E-10
S	Meat	NNW	6325	1.90E-08	1.83E-08	3.84E-11
S	RR-Inf-Lck-NG	NW	450	4.83E-08	4.55E-08	5.20E-10
S	Site Boundary	NW	762	2.35E-08	2.17E-08	2.83E-10
S	Inhalation	NW	2092	1.17E-08	1.09E-08	1.27E-10
S	Vegetation	NW	2574	1.29E-08	1.22E-08	1.02E-10
S	Meat	NW	6660	1.45E-08	1.40E-08	3.09E-11