Limerick Generating Station
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Exelon Nuclear

T.S. 6.9.1.8

April 28, 2011

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

Limerick Generating Station, Unit 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353 and 07200065

Subject: 2010 Annual Radioactive Effluent Release Report

In accordance with Section 6.9.1.8 of Limerick Generating Station (LGS) Technical Specifications and Section 6.2 of the Offsite Dose Calculation Manual, attached is the 2010 Annual Radioactive Effluent Release Report No. 36 for LGS.

In accordance with 10CFR72.44(d)(3) Limerick has reviewed TLD data from the ISFSI modules currently loaded. During the period of January 1, 2010 to December 31, 2010, there were no liquid or gaseous effluent releases from the ISFSI at Limerick.

There are no commitments contained in this letter.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

William F. Maguire
Vice President-LGS
Exelon Generation Company, LLC

Attachment: 1. 2010 Annual Radioactive Effluent Release Report No. 36 for LGS

cc: W. Dean, Administrator, Region I, USNRC (w/Attachments)
E. DiPaolo, LGS USNRC Senior Resident Inspector (w/Attachments)
T. Moslak, Inspector Region I, USNRC (w/Attachments)
USNRC Spent Fuel Project Office, Washington, DC (w/Attachments)
E. Thorton-Jones-US EPA, Office of Radiation and Indoor Air, Radiation Protection Division, Center of Waste Management, 1200 Pennsylvania Ave. MC 6608J, Washington, D.C.20460 (w/Attachments)

NMSS26
IE48
A009
NRR NMSS

bcc: D. Helker - KSA 3P (w/o Attachments)
J. Grimes – KSA-3N (w/o Attachments)
W. Maguire - GML 5-1 (w/o Attachments)
P. Gardner-GML 5-1(w/o Attachments)
D. Merchant - GML 1-1 (w/Attachments)
J. Hunter III - SSB 2-4 (w/Attachments)
A. Columbus - SMB 1-2 (w/Attachments)
D. Wahl – SSB 2-3 (w/Attachments)
L. Birkmire - SSB 2-2 (w/Attachments)
D. Eisenhut – NSRB (w/Attachments)
M. Murphy - PADEP BRP (w/Attachments)
S. Focht – ANI (w/Attachments)

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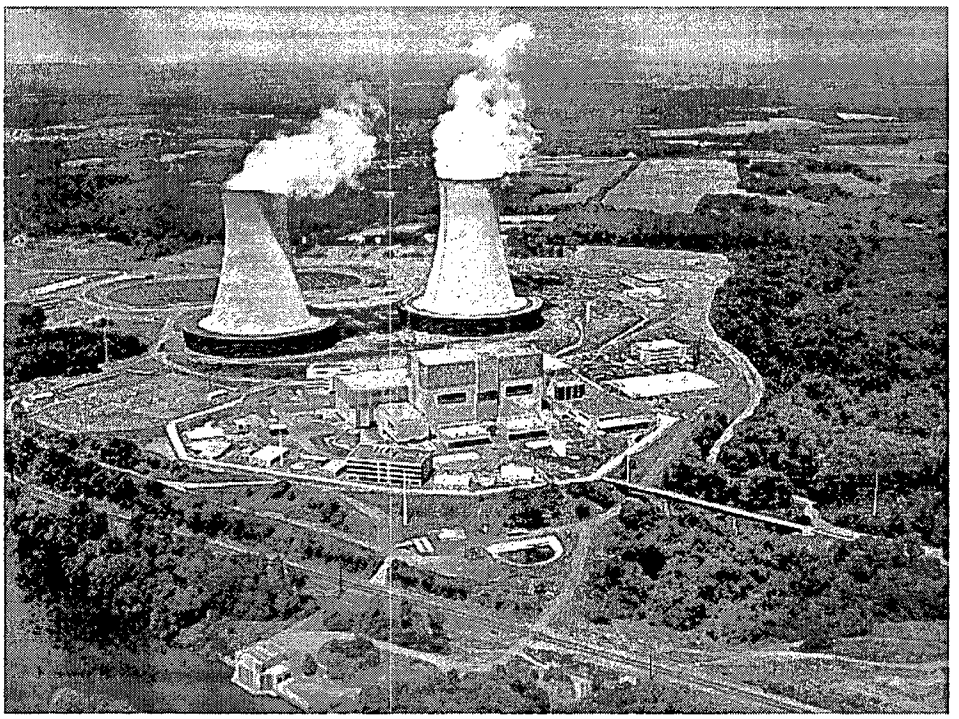

Annual Radioactive Effluent Release Report
No. 36

2010

Limerick Generating Station

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

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

NO. 36

January 1, 2010 through December 31, 2010

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

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, 2010 through December 31, 2010. 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 2010 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
	≤ 20	mRad	Air Beta	ODCM Control 3.2.2.2.a
c.	≤ 20	mRad	Air Gamma	Yearly air dose limits
	≤ 40	mRad	Air Beta	ODCM Control 3.2.2.2.b
d.	≤ 10	mrem	Total Body (Gamma)	10 CFR 50, Appendix I, Section
	≤ 30	mrem	Skin (Beta)	II.B.2(b)
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.	10 times the concentration limits in 10 CFR 20, Appendix B, Table 2 Col. 2			ODCM Control 3.2.1.1
b.	≤ 3	mrem	Total Body	Quarterly dose limits
	≤ 10	mrem	Any Organ	ODCM Control 3.2.1.2.a
c.	≤ 6	mrem	Total Body	Yearly dose limits
	≤ 20	mrem	Any Organ	ODCM Control 3.2.1.2.b
4. 40 CFR 190, 10 CFR 72.104				
	≤ 25	mrem	Total Body or Organ	Yearly dose limits
	≤ 75	mrem	Thyroid	ODCM Control 3.2.3

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 < 2E-04 μCi/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," may be 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 monitors 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 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. Carbon-14 in gaseous effluents

Gaseous releases of Carbon-14 were not measured, but rather estimated based upon the NRC Final Environmental Statement (FES), which estimated that the two unit Limerick Generating Station (LGS) would produce a release rate of 6.02E-01 uCi/sec (19 Ci per year). Dividing this FES estimated release rate by the 2009 North Stack average flow rate of 1.27E+08 cc/sec resulted in an average concentration of 4.71E-09 uCi/cc. This concentration was then applied to each 2010 weekly release permit from the North Stack. Using this method 18.8 Ci of C-14 was released in 2010.

4. 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.

5. 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.

6. 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:	LLD
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

7. 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

Liquid	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Number of Batch Releases	2.50E+01	1.60E+01	4.00E+00	3.00E+00	4.80E+01
Total time period for batch releases (min)	2.10E+03	1.21E+03	3.49E+02	2.78E+02	3.94E+03
Maximum time period for batch release (min)	1.04E+02	9.00E+01	1.03E+02	1.02E+02	1.04E+02
Average time period for batch release (min)	8.42E+01	7.54E+01	8.73E+01	9.27E+01	8.20E+01
Minimum time period for batch release (min)	2.70E+01	5.00E+00	7.40E+01	8.00E+01	5.00E+00
Average stream flow (Schuylkill River) during periods of release of effluents into a flowing stream (gpm)	2.27E+04	2.21E+04	2.22E+04	2.15E+04	2.24E+04
Aux Boiler Waste Oil Incineration	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Number of Batch Releases	N/A	N/A	N/A	N/A	N/A
Total time period for batch releases (min)	N/A	N/A	N/A	N/A	N/A
Maximum time period for batch release (min)	N/A	N/A	N/A	N/A	N/A
Average time period for batch release (min)	N/A	N/A	N/A	N/A	N/A
Minimum time period for batch release (min)	N/A	N/A	N/A	N/A	N/A
Gaseous	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Number of Batch Releases	1.00E+00	1.00E+00	0.00E+00	0.00E+00	2.00E+00
Total time period for batch releases (min)	2.82E+03	5.40E+02	0.00E+00	0.00E+00	3.36E+03
Maximum time period for batch release (min)	2.82E+03	5.40E+02	0.00E+00	0.00E+00	2.82E+03
Average time period for batch release (min)	2.82E+03	5.40E+02	0.00E+00	0.00E+00	1.68E+03
Minimum time period for batch release (min)	2.82E+03	5.40E+02	0.00E+00	0.00E+00	5.40E+02

F. Abnormal Releases

1. Liquid	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Number of Releases	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00
Total Activity Released (Ci)	0.00E+00	0.00E+00	0.00E+00	9.43E-03	9.43E-03
2. Gaseous					
Number of Releases	1.00E+00	1.00E+00	0.00E+00	0.00E+00	2.00E+00
Total Activity Released (Ci)	5.78E-08	2.92E-08	0.00E+00	0.00E+00	8.70E-08

There was one liquid release on 12/15/2010 that resulted in about 400 gallons of contaminated water released from an overflow of a turbine enclosure sample sink to a drain that discharges to the Limerick Hold Pond (IR1152478, IR1153412). In addition to tritium and gamma spectroscopy analyses performed on site, a sample was sent to an offsite laboratory for hard-to-detect analyses. The results of the analyses were as follows:

Nuclide	Activity uCi/ml		Nuclide	Activity uCi/ml
Mn-54	1.38E-05		Gross Alpha	< 4.28E-08
Co-60	6.29E-05		Fe-55	< 8.76E-07
Zn-65	2.32E-06		Ni-63	< 2.57E-07
Cs-137	1.92E-06		Sr-89	< 3.12E-08
H-3	6.15E-03		Sr-90	< 1.74E-08

The dose from this release was calculated as:

6.89E-05 mrem – Teenager Liver
6.01E-05 mrem – Adult Total Body

There were two gaseous releases from the emergency service water (ESW) pipe tunnel during the 1R13 outage IR01049470. On 03/29/2010 and 04/09/2010, cobalt-60 was identified on the continous air monitoring particulate filters for those two periods. The air from the U1 ESW pipe tunnel is exhaust to the U1 diesel bay area that is then exhausted to the environment. Although the Co-60 may not have ever left the ESW pipe tunnel area, it was treated as a release. The total calculated dose from these two releases was:

Dates	Skin Dose (mrem)	Total Body Dose (mrem)
03/27/2010 – 03/29/2010	2.77E-06	2.42E-06
04/08/2010 – 04/09/2010	1.40E-06	1.22E-06
Total	4.17E-06	3.64E-06

All activity and doses from these releases are included in the data tables of Appendix A, Effluent and Waste Disposal Summary.

G. Spills

There were no spills to ground containing radioactive material in 2010.

H. Revisions to the ODCM

There were no changes made to the ODCM in 2010.

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

There was no radioactive effluent monitoring instrumentation out of service for more than 30 days in 2010.

J. Independent Spent Fuel Storage Installation (ISFSI)

An Independent Spent Fuel Storage Installation (ISFSI) was placed in service starting July 21, 2008. There have been no gaseous or liquid releases from the ISFSI. In 2010 the dose to the nearest resident to the ISFSI using thermoluminescent dosimeters (TLDs) from the Radiological Environmental Monitoring Program was non detectable.

K. 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.

Appendix A
Effluent and Waste Disposal Summary

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LIST OF TABLES

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

TABLE 1A GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES PERIOD 2010

A. Fission And Activation Gasses	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total	Uncertainty (%)
Total Release	Ci	4.77E+00	1.87E+01	2.43E+01	6.34E+00	5.41E+01	36.6
Average Release Rate for Period	uCi/sec	6.05E-01	2.38E+00	3.08E+00	8.04E-01	1.72E+00	
Dose - Gamma Air Dose	mrad	2.88E-04	1.60E-03	1.59E-03	5.55E-04	4.04E-03	
- Beta Air Dose	mrad	1.76E-04	9.41E-04	9.62E-04	3.25E-04	2.40E-03	
Percent of ODCM Limit - Gamma Air Dose	%	2.88E-03	1.60E-02	1.59E-02	5.55E-03	2.02E-02	
- Beta Air Dose	%	8.78E-04	4.70E-03	4.81E-03	1.62E-03	6.01E-03	
B. Radioiodines	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	< LLD	< LLD	< LLD	< LLD	< LLD	20.4
Average Release Rate for Period	uCi/sec	< LLD	< LLD	< LLD	< LLD	< LLD	
Percent of ODCM Limit	%	*	*	*	*	*	
C. Particulates	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	5.78E-08	3.48E-06	< LLD	< LLD	3.53E-06	22.6
Average Release Rate for Period	uCi/sec	7.33E-09	4.41E-07	< LLD	< LLD	1.12E-07	
Percent of ODCM Limit	%	*	*	*	*	*	
D. Gross Alpha	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	< LLD	< LLD	< LLD	< LLD	< LLD	22.6
Average Release Rate for Period	uCi/sec	< LLD	< LLD	< LLD	< LLD	< LLD	
Percent of ODCM Limit	%	*	*	*	*	*	
E. Tritium (H-3)	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	1.13E+01	4.61E+00	1.31E+01	1.39E+01	4.28E+01	15.7
Average Release Rate for Period	uCi/sec	1.43E+00	5.84E-01	1.66E+00	1.76E+00	1.36E+00	
Percent of ODCM Limit	%	*	*	*	*	*	
F. Carbon-14	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	
Total Release	Ci	4.06E+00	5.47E+00	5.11E+00	4.15E+00	1.88E+01	
Average Release Rate for Period	uCi/sec	5.15E-01	6.94E-01	6.48E-01	5.26E-01	5.96E-01	
Percent of ODCM Limit	%	*	*	*	*	*	
G. Iodine 131 & 133, Particulate, C-14 & H-3	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	
Organ Dose	mrem	4.91E-02	6.61E-02	4.10E-02	3.24E-02	1.60E-01	
Percent of ODCM Limit	%	3.27E-01	4.40E-01	2.73E-01	2.16E-01	5.33E-01	

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

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

TABLE 1B–1 GASEOUS EFFLUENTS—GROUND-LEVEL RELEASE—BATCH MODE PERIOD 2010

Fission And Activation Gasses	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Ar-41	Ci	N/A	N/A	N/A	N/A	N/A
Kr-85	Ci	N/A	N/A	N/A	N/A	N/A
Kr-85m	Ci	N/A	N/A	N/A	N/A	N/A
Kr-87	Ci	N/A	N/A	N/A	N/A	N/A
Kr-88	Ci	N/A	N/A	N/A	N/A	N/A
Xe-133	Ci	N/A	N/A	N/A	N/A	N/A
Xe-135	Ci	N/A	N/A	N/A	N/A	N/A
Xe-135m	Ci	N/A	N/A	N/A	N/A	N/A
Xe-138	Ci	N/A	N/A	N/A	N/A	N/A
Total	Ci	N/A	N/A	N/A	N/A	N/A
Radioiodines	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Annual**
I-131	Ci	< LLD	< LLD	N/A	N/A	< LLD
I-133	Ci	< LLD	< LLD	N/A	N/A	< LLD
I-135	Ci	< LLD	< LLD	N/A	N/A	< LLD
Total	Ci	< LLD	< LLD	N/A	N/A	< LLD
Particulates	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Annual**
Cr-51	Ci	< LLD	< LLD	N/A	N/A	< LLD
Mn-54	Ci	< LLD	< LLD	N/A	N/A	< LLD
Co-58	Ci	< LLD	< LLD	N/A	N/A	< LLD
Co-60	Ci	5.78E-08	2.92E-08	N/A	N/A	8.70E-08
Zn-65	Ci	< LLD	< LLD	N/A	N/A	< LLD
Sr-89	Ci	< LLD	< LLD	N/A	N/A	< LLD
Sr-90	Ci	< LLD	< LLD	N/A	N/A	< LLD
Mo-99	Ci	< LLD	< LLD	N/A	N/A	< LLD
Ag-110m	Ci	< LLD	< LLD	N/A	N/A	< LLD
Cs-134	Ci	< LLD	< LLD	N/A	N/A	< LLD
Cs-137	Ci	< LLD	< LLD	N/A	N/A	< LLD
Ba-140	Ci	< LLD	< LLD	N/A	N/A	< LLD
La-140	Ci	< LLD	< LLD	N/A	N/A	< LLD
Ce-141	Ci	< LLD	< LLD	N/A	N/A	< LLD
Ce-144	Ci	< LLD	< LLD	N/A	N/A	< LLD
Total	Ci	5.78E-08	2.92E-08	N/A	N/A	8.70E-08
H-3	Ci	N/A	N/A	N/A	N/A	N/A
Gross Alpha	Ci	N/A	N/A	N/A	N/A	N/A
C-14	Ci	N/A	N/A	N/A	N/A	N/A

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

TABLE 1B–2 GASEOUS EFFLUENTS – GROUND LEVEL RELEASE - CONTINUOUS MODE PERIOD 2010

Fission And Activation Gasses	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Kr-85m	Ci	8.42E-02	3.51E-01	4.34E-01	1.19E-01	9.88E-01
Kr-85	Ci	5.94E-02	9.18E-01	4.90E-01	3.29E-01	1.80E+00
Kr-87	Ci	9.61E-02	5.33E-01	5.31E-01	1.84E-01	1.34E+00
Kr-88	Ci	1.17E-01	8.60E-01	7.06E-01	3.01E-01	1.98E+00
Ar-41	Ci	2.86E-01	4.50E-01	1.27E+00	1.34E-01	2.14E+00
Xe-131m	Ci	1.49E-03	2.29E-02	1.23E-02	8.23E-03	4.49E-02
Xe-133	Ci	1.49E+00	2.43E+00	6.63E+00	7.26E-01	1.13E+01
Xe-135m	Ci	1.19E+00	3.79E+00	5.80E+00	1.26E+00	1.20E+01
Xe-135	Ci	9.92E-01	4.57E+00	5.24E+00	1.56E+00	1.24E+01
Xe-138	Ci	4.57E-01	4.83E+00	3.16E+00	1.71E+00	1.02E+01
Total	Ci	4.77E+00	1.87E+01	2.43E+01	6.34E+00	5.41E+01
Radioiodines	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
I-131	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
I-133	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Total	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Particulates	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Annual**
Cr-51	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Mn-54	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Co-58	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Co-60	Ci	< LLD	3.45E-06	< LLD	< LLD	3.45E-06
Zn-65	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sr-89	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sr-90	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Mo-99	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Ag-110m	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sb-125	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Cs-134	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Cs-137	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Ba-140	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
La-140	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Ce-141	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Ce-144	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Total	Ci	< LLD	3.45E-06	< LLD	< LLD	3.45E-06
H-3	Ci	1.13E+01	4.61E+00	1.31E+01	1.39E+01	4.28E+01
Gross Alpha	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
C-14	Ci	4.06E+00	5.47E+00	5.11E+00	4.15E+00	1.88E+01

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

TABLE A2 LIQUID EFFLUENTS – SUMMATION OF ALL RELEASES PERIOD 2010

Fission and Activation Products Excluding Tritium, Gasses & Alpha)	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	7.72E-04	5.30E-04	7.70E-04	4.76E-04	2.55E-03	21.1
Average Concentration	uCi/ml	1.57E-08	1.93E-08	9.66E-08	7.80E-08	2.81E-08	
Dose - Whole Body	mrem	4.74E-04	1.61E-04	1.17E-04	1.73E-02	1.76E-02	
- Organ	mrem	7.11E-04	2.06E-04	1.55E-04	1.74E-02	1.76E-02	
% of ODCM Limit - Whole Body Dose*	%	1.58E-02	5.35E-03	3.91E-03	5.78E-01	2.93E-01	
- Organ Dose*	%	7.11E-03	2.06E-03	1.55E-03	1.74E-01	8.82E-02	
Tritium	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	4.47E+00	2.23E+00	6.71E-01	4.42E-01	7.82E+00	6.4
Average Concentration	uCi/ml	9.10E-05	8.11E-05	8.42E-05	7.25E-05	8.62E-05	
% of ODCM Limit - ECL	%	9.10E-01	8.11E-01	8.42E-01	7.25E-01	8.62E-01	
Dissolved and Entrained Gases	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	< LLD	8.07E-08	4.74E-06	< LLD	4.82E-06	21.1
Average Concentration	uCi/ml	< LLD	2.93E-12	5.95E-10	< LLD	5.31E-11	
% of ODCM Limit - ECL	%	< LLD	1.47E-06	2.98E-04	< LLD	2.66E-05	
Gross Alpha	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	< LLD	< LLD	< LLD	< LLD	< LLD	23.0
Average Concentration	uCi/ml	N/A	N/A	N/A	N/A	N/A	
Volume of Waste Released	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total	Liters	1.43E+06	8.65E+05	2.31E+05	1.17E+05	2.64E+06	5.0
Volume of Dilution Water used during period	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total	Liters	4.77E+07	2.66E+07	7.74E+06	5.99E+06	8.81E+07	3.6

* Percent of limit includes gases and tritium.

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

TABLE 2A–1 LIQUID EFFLUENTS - BATCH MODE PERIOD 2010

Fission and Activation Products	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
Cr-51	Ci	2.83E-05	4.41E-05	2.39E-05	< LLD	9.63E-05
Mn-54	Ci	6.01E-05	7.84E-05	1.66E-05	4.41E-05	1.99E-04
Fe-55	Ci	< LLD	< LLD	6.20E-04	1.95E-04	8.15E-04
Co-58	Ci	1.64E-05	1.57E-05	6.83E-06	2.53E-06	4.14E-05
Fe-59	Ci	2.76E-06	2.62E-06	9.60E-06	< LLD	1.50E-05
Co-60	Ci	2.98E-04	2.46E-04	5.67E-05	1.76E-04	7.77E-04
Zn-65	Ci	2.60E-04	9.05E-05	2.53E-05	4.28E-05	4.19E-04
Zn-69m	Ci	5.95E-07	< LLD	< LLD	< LLD	5.95E-07
Sr-89	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sr-90	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Zr-95	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Nb-95	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Nb-97	Ci	2.78E-06	< LLD	< LLD	< LLD	2.78E-06
Mo-99	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
TC-99m	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
AG-110m	Ci	7.99E-06	< LLD	< LLD	< LLD	7.99E-06
Sb-124	Ci	< LLD	3.68E-05	5.09E-06	7.05E-06	4.89E-05
Sb-125	Ci	5.87E-05	1.56E-05	5.05E-06	4.05E-06	8.34E-05
I-131	Ci	9.04E-07	< LLD	< LLD	< LLD	9.04E-07
Cs-134	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Cs-137	Ci	3.46E-05	< LLD	< LLD	5.66E-06	4.02E-05
Ba-140	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
La-140	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Ce-141	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Total	Ci	7.72E-04	5.30E-04	7.70E-04	4.76E-04	2.55E-03
Dissolved and Entrained Gases	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Xe-131m	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Xe-133	Ci	< LLD	< LLD	3.62E-06	< LLD	3.62E-06
Xe-135	Ci	< LLD	8.07E-08	1.12E-06	< LLD	1.20E-06
Total	Ci	< LLD	8.07E-08	4.74E-06	< LLD	4.82E-06
H-3	Ci	4.47E+00	2.23E+00	6.71E-01	4.42E-01	7.82E+00
Gross Alpha	Ci	< LLD	< LLD	< LLD	< LLD	< LLD

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

TABLE 2A-2 LIQUID EFFLUENTS - CONTINUOUS MODE PERIOD 2010

Fission and Activation Products	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Cr-51	Ci	N/A	N/A	N/A	N/A	N/A
Mn-54	Ci	N/A	N/A	N/A	N/A	N/A
Fe-55	Ci	N/A	N/A	N/A	N/A	N/A
Co-58	Ci	N/A	N/A	N/A	N/A	N/A
Fe-59	Ci	N/A	N/A	N/A	N/A	N/A
Co-60	Ci	N/A	N/A	N/A	N/A	N/A
Zn-65	Ci	N/A	N/A	N/A	N/A	N/A
Sr-89	Ci	N/A	N/A	N/A	N/A	N/A
Sr-90	Ci	N/A	N/A	N/A	N/A	N/A
Zr-95	Ci	N/A	N/A	N/A	N/A	N/A
Nb-95	Ci	N/A	N/A	N/A	N/A	N/A
Mo-99	Ci	N/A	N/A	N/A	N/A	N/A
Tc-99m	Ci	N/A	N/A	N/A	N/A	N/A
Ag-110m	Ci	N/A	N/A	N/A	N/A	N/A
I-131	Ci	N/A	N/A	N/A	N/A	N/A
Cs-134	Ci	N/A	N/A	N/A	N/A	N/A
Cs-137	Ci	N/A	N/A	N/A	N/A	N/A
Ba-140	Ci	N/A	N/A	N/A	N/A	N/A
La-140	Ci	N/A	N/A	N/A	N/A	N/A
Ce-141	Ci	N/A	N/A	N/A	N/A	N/A
Total	Ci	N/A	N/A	N/A	N/A	N/A
Dissolved and Entrained Gases	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Xe-131m	Ci	N/A	N/A	N/A	N/A	N/A
Xe-133	Ci	N/A	N/A	N/A	N/A	N/A
Xe-135	Ci	N/A	N/A	N/A	N/A	N/A
Total	Ci	N/A	N/A	N/A	N/A	N/A
H-3	Ci	N/A	N/A	N/A	N/A	N/A
Gross Alpha	Ci	N/A	N/A	N/A	N/A	N/A

Appendix B
Solid Waste and Irradiated Fuel Shipments

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A. Solid waste shipped offsite for burial or disposal (not irradiated fuel) 01/01/2010 – 12/31/2010

1. Type of waste

Type of waste	Unit	12 Month Period	Estimated Error %
a. Spent resin, filters sludges, evaporator bottoms, etc	m^3	68.28	25%
	Ci	3.06E+02	
b. Dry compressible waste, contaminated equipment, etc.	m^3	75.80	25%
	Ci	3.16E+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)

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

Isotope	Waste Class A Curies *	Percent Abundance
C-14	5.57E-01	0.18%
Mn-54	1.57E+01	5.13%
Fe-55	1.47E+02	48.04%
Co-60	1.16E+02	37.91%
Ni-59	3.78E-02	0.01%
Ni-63	4.87E+00	1.58%
Zn-65	1.77E+01	5.78%
Sr-90	7.84E-02	0.03%
Cs-137	3.03E+00	0.99%
Ce-144	5.08E-01	0.17%
Pu-241	1.41E-01	0.05%
H-3	1.14E-01	0.04%
Co-58	2.72E-01	0.09%
Totals	3.06E+02	100.00%

* Activity is estimated

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

Isotope	Waste Class A Curies *	Percent Abundance
Ce-144	1.81E-02	0.57%
Co-60	1.39E+00	43.98%
Cs-137	7.44E-03	0.23%
Fe-55	1.33E+00	42.08%
Mn-54	2.37E-01	7.49%
Ni-63	1.15E-01	3.63%
Zn-65	6.42E-02	2.02%
TOTALS	3.16E+00	100.00%

* Activity is estimated

3. Solid Waste (Disposition)

Number of Shipments	Mode of Transportation	Destination
44	Truck	Duratek to Energy Solutions / Clive
7	Truck	Limerick Gen. Sta. to Energy Solutions / Clive

4. Waste (Processing)

Number of Shipments	Mode of Transportation	Destination
25	Truck	Limerick to Duratek

5. Waste (Solidification)

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

Category A - 9 shipments Type A LSA
Category A - 5 shipments > Type A LSA
Category B - 18 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

C. Changes to the Process Control Program

There were no revisions to procedure RW-AA-100, "Process Control Program for Radioactive Wastes".

Appendix C
Radiological Impact to Man

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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

- Long term annual average meteorology and actual gaseous effluent releases were used.
- Gamma air dose, Beta air dose, Total Body and Skin doses were attributed to noble gas releases.
- Critical organ and age group dose attributed to iodine, particulate, carbon-14 and tritium releases.
- 100 percent occupancy factor was assumed.
- Thermoluminescence Dosimetry (TLD) measurements (minus background levels) obtained from the Radiological Environmental Monitoring Program for the nearest residence to the Independent Spent Fuel Storage Installation (ISFSI) was used to determine direct radiation exposure.
- For 40 CFR 190 compliance, the highest doses from the critical organ and critical age group for each release pathway was summed and added to the net TLD measurement from nearest residence to the ISFSI.

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

Maximum Individual **Noble Gas**	**Applicable Dose**	**Estimated Dose**	**Age Group**	**% of Applicable Limit**	**Limit**	**Unit**
Nearest Residence	Gamma Air Dose	4.04E-03	All	2.02E-02	20	mRad
Nearest Residence	Beta Air Dose	2.40E-03	All	6.01E-03	40	mRad
Nearest Residence	Total Body	3.83E-03	All	3.84E-02	10	mrem
Nearest Residence	Skin	6.39E-03	All	2.13E-02	30	mrem
Iodine, Particulate, C-14 & Tritium						
Cow Milk	Bone	1.56E-01	Child	5.21E-01	30	mrem
Liquid						
Aqua PA	Total Body	1.76E-02	Child	2.93E-01	6	mrem
Aqua PA	Liver	1.77E-02	Child	8.82E-02	20	mrem

40 CFR 190 Compliance								
	Gaseous Effluents		**Liquid Effluents**	**Direct Radiation**	**Total**	**% of Applicable Limit**	**Limit**	**Unit**
	Noble Gas	**Particulate, Iodone, C-14 & Tritium**						
Total Body Dose	3.84E-03	3.22E-02	1.76E-02	0.00E+00	5.36E-02	2.15E-01	25	mrem
Organ Dose	3.84E-03	1.56E-01	1.77E-02	0.00E+00	1.78E-01	7.10E-01	25	mrem
Thryoid Dose	3.84E-03	3.22E-02	1.76E-02	0.00E+00	5.36E-02	7.15E-02	75	mrem

Doses calculated were well below all ODCM and 40 CFR Part 190 limits 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. 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. A MEMBER OF THE PUBLIC may receive up to 100 mrem in a year (10CFR20.1301). 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 south shore of the Schuylkill River and the railroad tracks that runs along the north 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:

- Long term annual average meteorology and actual effluent releases for the the sectors encompacing the Railroad Tracks (W), Information Center, Frick's Lock and the Security Checkpoint were used.
- Dose is from ground plane and inhalation only. No ingestion dose.
- Adult age group was used for the State Police and National Guard Dose.
- The maximum expected occupancy factor is 25% of a working year at all locations.

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

Location	Sector	Approx. Distance (meters)	x/Q s/m^3	D/Q 1/m^2	Total Body Dose mrem(1)		Organ Dose, mrem(1)	Total
					Noble Gas	Iodine, Particulate, C-14 & H-3	Iodine, Particulate, C-14 & H-3	
R.R. Tracks	W	225	2.66E-06	2.36E-08	4.43E-03	4.99E-02	6.09E-02	1.15E-01
Info. Center	ESE	884	7.32E-07	9.27E-09	1.22E-03	1.37E-02	1.68E-02	3.17E-02
Frick's Lock	WSW	450	5.58E-07	4.78E-09	9.30E-04	4.94E-02	1.95E-01	2.45E-01
National Guard / Security Check Point	NNE	682	4.00E-07	4.43E-09	6.66E-04	3.04E-04	1.09E-02	1.19E-02

Doses calculated were a small fraction of the 10 CFR 20.1301 limits.

Notes:

(1) The limit for sum of the Total Body Dose and Organ Dose = 100 mrem (ref. 10 CFR 20.1301)

Appendix D
Meteorological Data

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LIST OF TABLES

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

Table D – 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	3	5	1	0	0	10
NNE	0	1	4	0	0	0	5
NE	2	1	0	0	0	0	3
ENE	0	5	0	0	0	0	5
E	4	16	1	0	0	0	21
ESE	1	9	3	1	0	0	14
SE	0	3	2	0	0	0	5
SSE	0	3	0	0	0	0	3
S	0	1	2	0	0	0	3
SSW	2	5	1	0	0	0	8
SW	0	2	1	0	0	0	3
WSW	1	6	3	0	0	0	10
W	0	22	10	0	0	0	32
WNW	6	16	25	1	0	0	48
NW	2	10	18	14	0	0	44
NNW	1	1	4	5	0	0	11
Variable	0	0	0	0	0	0	0
Total	20	104	79	22	0	0	225

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: 7

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

Table D – 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	6	0	0	0	8
NNE	2	1	2	0	0	0	5
NE	0	0	0	0	0	0	0
ENE	2	2	0	0	0	0	4
E	2	1	0	0	0	0	3
ESE	3	2	0	0	0	0	5
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	1	0	0	0	1
SW	0	0	0	0	0	0	0
WSW	0	1	1	0	0	0	2
W	0	8	8	0	0	0	16
WNW	0	7	17	4	0	0	28
NW	0	2	30	14	2	0	48
NNW	0	1	2	1	0	0	4
Variable	0	0	0	0	0	0	0
Total	9	27	67	19	2	0	124

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: 7

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

Table D – 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	4	6	0	0	0	11
NNE	2	0	1	0	0	0	3
NE	1	0	0	0	0	0	1
ENE	1	7	0	1	0	0	9
E	0	4	2	0	0	0	6
ESE	1	1	2	0	0	0	4
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	1	0	0	0	0	1
SSW	1	1	0	0	0	0	2
SW	0	0	0	0	0	0	0
WSW	2	0	0	0	0	0	2
W	0	5	6	0	0	0	11
WNW	1	7	21	6	0	0	35
NW	0	6	21	20	5	0	52
NNW	0	2	2	1	0	0	5
Variable	0	0	0	0	0	0	0
Total	10	38	61	28	5	0	142

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: 7

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

Table D – 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	11	24	26	0	0	0	61
NNE	6	16	14	0	0	0	36
NE	12	28	11	0	0	0	51
ENE	13	31	25	14	0	0	83
E	12	8	6	4	2	0	32
ESE	4	6	6	0	0	0	16
SE	1	6	2	1	0	0	10
SSE	1	4	5	2	1	0	13
S	3	2	5	0	0	0	10
SSW	2	1	1	0	0	0	4
SW	3	1	0	0	0	0	4
WSW	6	4	0	0	0	0	10
W	12	43	33	8	0	0	96
WNW	11	76	89	21	0	0	197
NW	7	72	167	76	9	0	331
NNW	9	29	28	6	0	0	72
Variable	0	0	0	0	0	0	0
Total	113	351	418	132	12	0	1026

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: 7

Table D –1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	3	0	0	0	0	8
NNE	3	2	0	0	0	0	5
NE	5	2	0	0	0	0	7
ENE	8	5	0	0	0	0	13
E	1	3	2	0	0	0	6
ESE	3	6	2	0	0	0	11
SE	3	1	3	5	0	0	12
SSE	0	3	1	0	2	0	6
S	2	7	4	0	0	0	13
SSW	4	1	1	0	0	0	6
SW	12	2	1	0	0	0	15
WSW	22	9	1	0	0	0	32
W	27	51	1	0	0	0	79
WNW	15	47	15	4	0	0	81
NW	5	20	11	4	0	0	40
NNW	6	7	1	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	121	169	43	13	2	0	348

Hours of calm in this stability class: 2
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 7

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

Table D – 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	7	0	0	0	0	0	7
NNE	1	0	0	0	0	0	1
NE	1	0	0	0	0	0	1
ENE	1	1	0	0	0	0	2
E	2	0	0	0	0	0	2
ESE	2	0	0	0	0	0	2
SE	0	1	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	3	3	0	0	0	0	6
SW	11	0	0	0	0	0	11
WSW	17	1	0	0	0	0	18
W	23	6	0	0	0	0	29
WNW	17	16	0	0	0	0	33
NW	10	1	1	4	0	0	16
NNW	3	1	0	0	0	0	4
Variable	2	0	0	0	0	0	2
Total	100	30	1	4	0	0	135

Hours of calm in this stability class: 9
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 7

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

Table D – 1 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	11	0	0	0	0	0	11
NNE	4	0	0	0	0	0	4
NE	6	0	0	0	0	0	6
ENE	3	0	0	0	0	0	3
E	1	0	0	0	0	0	1
ESE	1	0	0	0	0	0	1
SE	1	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	1	0	0	0	0	0	1
SW	5	0	0	0	0	0	5
WSW	6	0	0	0	0	0	6
W	21	0	0	0	0	0	21
WNW	29	1	0	0	0	0	30
NW	14	3	0	0	0	0	17
NNW	9	1	0	0	0	0	10
Variable	2	0	0	0	0	0	2
Total	114	5	0	0	0	0	119

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: 7

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

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	2	6	3	0	0	12
NNE	0	1	5	0	0	0	6
NE	2	0	1	0	0	0	3
ENE	0	4	0	0	0	0	4
E	2	15	3	0	0	0	20
ESE	1	4	6	1	0	0	12
SE	0	4	1	3	0	0	8
SSE	0	3	1	0	0	0	4
S	1	0	2	1	0	0	4
SSW	0	2	3	1	0	0	6
SW	0	1	4	2	0	0	7
WSW	0	1	4	4	0	0	9
W	2	6	15	12	0	0	35
WNW	0	8	18	17	4	0	47
NW	1	3	10	10	9	0	33
NNW	0	1	3	10	1	0	15
Variable	0	0	0	0	0	0	0
Total	10	55	82	64	14	0	225

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: 7

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	7	2	0	0	9
NNE	0	0	1	3	0	0	4
NE	2	0	0	0	0	0	2
ENE	1	1	0	0	0	0	2
E	1	3	0	0	0	0	4
ESE	2	3	0	0	0	0	5
SE	0	0	0	0	0	0	0
SSE	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	0	0	1	0	0	1
SW	0	0	0	0	0	0	0
WSW	0	1	2	1	0	0	4
W	0	1	3	9	0	0	13
WNW	0	1	7	13	13	0	34
NW	0	2	0	26	7	3	38
NNW	0	0	2	5	0	0	7
Variable	0	0	0	0	0	0	0
Total	7	12	22	60	20	3	124

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: 7

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	2	5	3	0	0	11
NNE	1	0	0	3	0	0	4
NE	1	0	1	0	0	0	2
ENE	1	3	3	1	1	0	9
E	0	1	5	0	0	0	6
ESE	0	2	0	2	0	0	4
SE	0	0	0	0	0	0	0
SSE	0	0	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	2	0	0	0	0	2
SW	0	0	0	0	0	0	0
WSW	1	0	0	0	0	0	1
W	0	1	5	4	0	0	10
WNW	0	4	8	21	10	3	46
NW	0	0	9	14	11	7	41
NNW	0	0	2	3	0	0	5
Variable	0	0	0	0	0	0	0
Total	5	15	39	51	22	10	142

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: 7

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

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	4	6	42	13	0	0	65
NNE	9	4	27	10	0	0	50
NE	6	4	20	8	1	0	39
ENE	6	24	37	17	12	1	97
E	4	13	13	5	1	3	39
ESE	1	5	4	5	0	0	15
SE	3	2	6	2	0	0	13
SSE	0	4	9	2	1	3	19
S	0	3	0	3	2	0	8
SSW	1	4	1	0	1	0	7
SW	1	2	1	0	0	0	4
WSW	0	4	4	1	0	0	9
W	1	6	21	21	2	0	51
WNW	1	14	61	109	53	13	251
NW	1	6	88	107	42	15	259
NNW	6	9	58	32	0	0	105
Variable	0	0	0	0	0	0	0
Total	44	110	392	335	115	35	1031

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: 7

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

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	4	5	0	0	0	9
NNE	1	1	2	0	0	0	4
NE	2	4	2	0	0	0	8
ENE	1	11	4	0	0	0	16
E	2	2	3	3	0	0	10
ESE	0	6	0	1	0	0	7
SE	0	6	0	4	0	0	10
SSE	0	2	1	2	4	3	12
S	1	2	4	5	0	0	12
SSW	0	2	2	1	0	0	5
SW	0	5	5	1	1	0	12
WSW	0	11	12	1	1	0	25
W	1	12	25	7	0	0	45
WNW	1	13	54	32	2	4	106
NW	0	3	31	13	5	0	52
NNW	0	1	12	3	0	0	16
Variable	0	0	0	0	0	0	0
Total	9	85	162	73	13	7	349

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: 7

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	>24	Total
N	0	2	3	0	0	0	5
NNE	1	3	0	0	0	0	4
NE	0	0	0	0	0	0	0
ENE	2	1	1	0	0	0	4
E	0	3	2	1	0	0	6
ESE	1	0	0	0	0	0	1
SE	2	1	0	0	0	0	3
SSE	2	0	0	0	0	0	2
S	0	1	0	0	0	0	1
SSW	0	0	2	0	0	0	2
SW	0	3	4	0	0	0	7
WSW	2	11	10	0	0	0	23
W	1	10	6	0	0	0	17
WNW	0	13	19	3	0	0	35
NW	1	7	13	1	5	0	27
NNW	1	2	3	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	13	57	63	5	5	0	143

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: 7

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

Table D – 2 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, January – March, 2010

Limerick Tower 1

Period of Record: January - March 2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	4	1	0	0	0	6
NNE	0	3	1	0	0	0	4
NE	1	1	1	0	0	0	3
ENE	5	1	0	0	0	0	6
E	3	2	0	0	0	0	5
ESE	1	1	0	0	0	0	2
SE	2	0	0	0	0	0	2
SSE	3	0	0	0	0	0	3
S	0	0	0	0	0	0	0
SSW	1	0	0	0	0	0	1
SW	1	3	1	0	0	0	5
WSW	5	7	1	0	0	0	13
W	4	13	1	0	0	0	18
WNW	4	17	14	3	0	0	38
NW	4	11	3	1	0	0	19
NNW	1	5	4	0	0	0	10
Variable	0	0	0	0	0	0	0
Total	36	68	27	4	0	0	135

Hours of calm in this stability class: 2
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 7

Table D – 3 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	9	2	0	0	0	12
NNE	1	2	0	0	0	0	3
NE	2	6	2	0	0	0	10
ENE	1	7	0	0	0	0	8
E	4	17	2	0	0	0	23
ESE	2	14	5	0	0	0	21
SE	12	8	3	0	0	0	23
SSE	18	11	2	0	0	0	31
S	10	13	10	1	0	0	34
SSW	10	30	6	0	0	0	46
SW	14	29	5	0	0	0	48
WSW	8	35	6	0	0	0	49
W	14	39	13	1	0	0	67
WNW	8	57	30	7	0	0	102
NW	6	57	71	37	0	0	171
NNW	6	16	17	7	0	0	46
Variable	2	0	0	0	0	0	2
Total	119	350	174	53	0	0	696

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	1	2	0	0	0	0	3
ENE	0	2	1	0	0	0	3
E	3	3	0	0	0	0	6
ESE	1	2	1	0	0	0	4
SE	2	0	0	0	0	0	2
SSE	1	0	0	0	0	0	1
S	0	1	2	0	0	0	3
SSW	0	4	1	0	0	0	5
SW	4	3	0	0	0	0	7
WSW	3	3	1	0	0	0	7
W	2	4	0	0	0	0	6
WNW	1	5	3	1	0	0	10
NW	1	6	11	4	0	0	22
NNW	0	4	0	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	19	39	20	5	0	0	83

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	1	0	0	0	0	1
NE	0	5	0	0	0	0	5
ENE	0	9	0	0	0	0	9
E	0	2	0	0	0	0	2
ESE	1	0	1	0	0	0	2
SE	1	0	0	0	0	0	1
SSE	3	0	0	0	0	0	3
S	1	3	0	0	0	0	4
SSW	0	4	1	0	0	0	5
SW	1	5	2	0	0	0	8
WSW	0	4	1	0	0	0	5
W	2	5	0	0	0	0	7
WNW	5	3	5	2	0	0	15
NW	3	5	7	5	0	0	20
NNW	2	2	1	2	0	0	7
Variable	0	0	0	0	0	0	0
Total	19	48	18	9	0	0	94

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	7	11	4	0	0	0	22
NNE	9	8	0	0	0	0	17
NE	10	12	0	0	0	0	22
ENE	7	39	4	0	0	0	50
E	12	32	4	0	0	0	48
ESE	7	9	6	0	0	0	22
SE	8	6	0	0	0	0	14
SSE	5	16	1	0	0	0	22
S	4	19	3	0	0	0	26
SSW	9	22	1	0	0	0	32
SW	8	7	2	0	0	0	17
WSW	16	6	0	0	0	0	22
W	7	7	1	0	0	0	15
WNW	14	17	15	5	0	0	51
NW	12	30	21	8	0	0	71
NNW	10	9	6	0	0	0	25
Variable	0	0	0	0	0	0	0
Total	145	250	68	13	0	0	476

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	10	3	0	0	0	18
NNE	1	6	0	0	0	0	7
NE	3	2	0	0	0	0	5
ENE	4	1	1	0	0	0	6
E	6	7	0	0	0	0	13
ESE	4	8	0	0	0	0	12
SE	7	6	0	0	0	0	13
SSE	7	14	0	0	0	0	21
S	8	30	0	0	0	0	38
SSW	18	24	0	0	0	0	42
SW	29	4	0	0	0	0	33
WSW	30	10	0	0	0	0	40
W	35	10	0	0	0	0	45
WNW	27	23	1	0	0	0	51
NW	13	13	8	0	0	0	34
NNW	7	11	0	0	0	0	18
Variable	3	0	0	0	0	0	3
Total	207	179	13	0	0	0	399

Hours of calm in this stability class: 4
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	3	0	0	0	0	8
NNE	4	2	0	0	0	0	6
NE	3	2	0	0	0	0	5
ENE	3	0	0	0	0	0	3
E	3	0	1	0	0	0	4
ESE	3	0	0	0	0	0	3
SE	2	3	0	0	0	0	5
SSE	2	1	0	0	0	0	3
S	9	2	0	0	0	0	11
SSW	8	10	0	0	0	0	18
SW	10	2	0	0	0	0	12
WSW	22	3	0	0	0	0	25
W	32	2	0	0	0	0	34
WNW	36	4	0	0	0	0	40
NW	24	3	0	0	0	0	27
NNW	12	1	0	0	0	0	13
Variable	7	0	0	0	0	0	7
Total	185	38	1	0	0	0	224

Hours of calm in this stability class: 13
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	7	0	0	0	0	0	7
NNE	5	1	0	0	0	0	6
NE	7	0	0	0	0	0	7
ENE	2	0	0	0	0	0	2
E	2	1	0	0	0	0	3
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	0	0	0	0	0	2
SSW	1	0	0	0	0	0	1
SW	6	0	0	0	0	0	6
WSW	10	0	0	0	0	0	10
W	16	0	0	0	0	0	16
WNW	31	0	0	0	0	0	31
NW	32	0	0	0	0	0	32
NNW	12	0	0	0	0	0	12
Variable	2	0	0	0	0	0	2
Total	138	2	0	0	0	0	140

Hours of calm in this stability class: 36
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 18

Table D – 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	4	6	1	0	0	11
NNE	4	3	0	0	0	0	7
NE	1	4	5	0	0	0	10
ENE	1	6	3	0	0	0	10
E	3	9	7	0	0	0	19
ESE	3	11	5	3	0	0	22
SE	5	11	2	3	0	0	21
SSE	7	12	9	0	0	0	28
S	7	10	11	6	1	0	35
SSW	4	12	21	5	2	0	44
SW	5	25	17	7	4	0	58
WSW	7	14	28	9	4	0	62
W	5	19	37	31	9	5	106
WNW	3	22	41	39	23	1	129
NW	3	13	43	30	18	0	107
NNW	0	8	12	5	2	0	27
Variable	0	0	0	0	0	0	0
Total	58	183	247	139	63	6	696

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: 18

Table D – 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
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	1	1	3	0	0	0	5
E	1	1	1	0	0	0	3
ESE	1	0	2	1	0	0	4
SE	1	1	0	0	0	0	2
SSE	0	0	0	0	0	0	0
S	1	1	2	1	0	0	5
SSW	1	1	5	1	0	0	8
SW	1	1	2	1	0	0	5
WSW	0	1	4	1	1	0	7
W	2	2	2	3	0	1	10
WNW	0	3	3	6	5	0	17
NW	0	2	6	4	1	0	13
NNW	0	1	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	9	17	31	18	7	1	83

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	2	0	0	0	0	2
NE	1	4	2	0	0	0	7
ENE	1	1	7	0	0	0	9
E	0	1	1	0	0	0	2
ESE	0	1	1	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	1	3	0	0	0	0	4
S	0	1	3	1	0	0	5
SSW	1	1	3	0	0	0	5
SW	0	0	4	1	1	0	6
WSW	1	2	2	2	1	0	8
W	0	2	2	4	1	0	9
WNW	1	7	4	3	8	0	23
NW	0	0	7	1	1	0	9
NNW	0	0	0	1	2	0	3
Variable	0	0	0	0	0	0	0
Total	6	25	36	13	14	0	94

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: 18

Table D – 4 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, April - June, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	9	5	3	0	0	22
NNE	2	15	6	0	0	0	23
NE	3	13	9	0	0	0	25
ENE	0	19	32	1	0	0	52
E	3	18	21	3	0	0	45
ESE	2	8	8	6	0	0	24
SE	1	6	2	0	0	0	9
SSE	2	11	14	2	0	0	29
S	1	12	17	3	1	0	34
SSW	1	3	15	4	0	0	23
SW	3	7	9	3	0	0	22
WSW	1	10	10	0	0	0	21
W	2	6	7	5	0	2	22
WNW	2	13	21	21	13	2	72
NW	3	15	13	5	3	0	39
NNW	1	5	6	3	0	0	15
Variable	0	0	0	0	0	0	0
Total	32	170	195	59	17	4	477

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	1	6	16	2	0	0	25
NNE	0	1	5	0	0	0	6
NE	1	2	3	0	0	0	6
ENE	2	0	0	0	0	0	2
E	1	3	7	1	0	0	12
ESE	0	4	3	0	0	0	7
SE	4	9	6	0	0	0	19
SSE	2	4	12	0	0	0	18
S	0	13	28	2	0	0	43
SSW	0	18	31	4	0	0	53
SW	1	23	13	3	0	0	40
WSW	1	21	13	2	0	0	37
W	1	19	7	1	1	0	29
WNW	1	17	39	13	1	0	71
NW	1	6	11	4	0	0	22
NNW	1	4	8	0	0	0	13
Variable	0	0	0	0	0	0	0
Total	17	150	202	32	2	0	403

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	4	8	6	0	0	0	18
NNE	3	1	5	0	0	0	9
NE	1	2	1	0	0	0	4
ENE	0	1	0	0	0	0	1
E	0	1	0	1	0	0	2
ESE	2	2	1	0	0	0	5
SE	1	3	1	0	0	0	5
SSE	2	2	0	0	0	0	4
S	0	3	2	1	0	0	6
SSW	0	5	7	5	0	0	17
SW	2	17	8	0	0	0	27
WSW	3	8	9	0	0	0	20
W	2	15	9	2	0	0	28
WNW	1	20	27	1	0	0	49
NW	1	18	11	0	0	0	30
NNW	2	6	3	0	0	0	11
Variable	0	0	0	0	0	0	0
Total	24	112	90	10	0	0	236

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: 18

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, 2010

Limerick Tower 1

Period of Record: April - June 2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	3	4	1	0	0	0	8
NNE	3	6	1	0	0	0	10
NE	2	0	0	0	0	0	2
ENE	1	1	0	0	0	0	2
E	1	1	0	0	0	0	2
ESE	5	1	0	0	0	0	6
SE	2	0	0	0	0	0	2
SSE	3	1	0	0	0	0	4
S	0	2	0	0	0	0	2
SSW	1	1	0	0	0	0	2
SW	4	4	1	0	0	0	9
WSW	2	4	2	0	0	0	8
W	4	13	1	0	0	0	18
WNW	9	28	16	0	0	0	53
NW	6	18	6	0	0	0	30
NNW	0	14	1	0	0	0	15
Variable	0	0	0	0	0	0	0
Total	46	98	29	0	0	0	173

Hours of calm in this stability class: 3
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 18

Table D – 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	16	4	0	0	0	20
NNE	2	12	1	0	0	0	15
NE	1	8	1	0	0	0	10
ENE	2	3	0	0	0	0	5
E	1	4	0	0	0	0	5
ESE	0	4	1	0	0	0	5
SE	1	7	1	0	0	0	9
SSE	2	8	0	0	0	0	10
S	7	27	4	0	0	0	38
SSW	2	34	3	0	0	0	39
SW	5	36	0	0	0	0	41
WSW	6	41	0	0	0	0	47
W	11	46	13	0	0	0	70
WNW	8	30	9	0	0	0	47
NW	4	41	23	4	0	0	72
NNW	2	11	9	0	0	0	22
Variable	0	0	0	0	0	0	0
Total	54	328	69	4	0	0	455

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: 40

Table D – 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	4	1	0	0	0	5
NNE	1	1	0	0	0	0	2
NE	0	1	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	3	2	0	0	0	5
ESE	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	1	0	0	0	0	1
S	4	6	0	0	0	0	10
SSW	3	7	0	0	0	0	10
SW	2	7	0	0	0	0	9
WSW	4	4	0	0	0	0	8
W	3	3	0	0	0	0	6
WNW	2	7	3	0	0	0	12
NW	3	11	20	0	0	0	34
NNW	0	2	5	0	0	0	7
Variable	0	0	0	0	0	0	0
Total	22	58	31	0	0	0	111

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: 40

Table D – 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	6	1	0	0	0	9
NNE	2	2	0	0	0	0	4
NE	3	3	0	0	0	0	6
ENE	2	1	1	0	0	0	4
E	1	5	1	0	0	0	7
ESE	3	1	0	0	0	0	4
SE	0	0	0	0	0	0	0
SSE	2	1	0	0	0	0	3
S	2	2	0	0	0	0	4
SSW	6	3	1	0	0	0	10
SW	2	5	0	0	0	0	7
WSW	2	3	0	0	0	0	5
W	3	4	1	0	0	0	8
WNW	3	5	4	0	0	0	12
NW	3	4	21	2	0	0	30
NNW	0	5	4	0	0	0	9
Variable	0	0	0	0	0	0	0
Total	36	50	34	2	0	0	122

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: 40

Table D – 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	13	13	5	0	0	0	31
NNE	6	10	3	0	0	0	19
NE	7	18	1	0	0	0	26
ENE	8	24	4	0	0	0	36
E	6	12	10	0	0	0	28
ESE	5	10	0	0	0	0	15
SE	5	9	2	0	0	0	16
SSE	8	19	5	0	0	0	32
S	15	28	5	0	0	0	48
SSW	9	13	1	0	0	0	23
SW	14	6	0	0	0	0	20
WSW	7	4	0	0	0	0	11
W	15	7	0	0	0	0	22
WNW	20	15	3	0	0	0	38
NW	10	45	23	3	0	0	81
NNW	10	17	5	0	0	0	32
Variable	0	0	0	0	0	0	0
Total	158	250	67	3	0	0	478

Hours of calm in this stability class: 3
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 40

Table D – 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	11	6	1	0	0	0	18
NNE	11	6	0	0	0	0	17
NE	14	3	0	0	0	0	17
ENE	11	7	0	0	0	0	18
E	7	7	0	0	0	0	14
ESE	7	16	0	0	0	0	23
SE	9	8	1	1	0	0	19
SSE	4	20	5	2	0	0	31
S	22	43	2	0	0	0	67
SSW	17	25	1	0	0	0	43
SW	26	1	0	0	0	0	27
WSW	23	1	0	0	0	0	24
W	47	9	0	0	0	0	56
WNW	52	19	0	0	0	0	71
NW	24	9	2	0	0	0	35
NNW	18	7	0	0	0	0	25
Variable	4	0	0	0	0	0	4
Total	307	187	12	3	0	0	509

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: 40

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, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	16	1	0	0	0	0	17
NNE	9	2	0	0	0	0	11
NE	6	1	0	0	0	0	7
ENE	4	0	0	0	0	0	4
E	0	0	0	0	0	0	0
ESE	2	0	0	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	4	0	0	0	0	0	4
S	0	3	0	0	0	0	3
SSW	8	3	0	0	0	0	11
SW	16	0	0	0	0	0	16
WSW	21	0	0	0	0	0	21
W	39	0	0	0	0	0	39
WNW	44	3	0	0	0	0	47
NW	41	2	0	0	0	0	43
NNW	11	0	0	0	0	0	11
Variable	4	0	0	0	0	0	4
Total	225	15	0	0	0	0	240

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: 40

Table D – 5 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	12	0	0	0	0	0	12
NNE	6	0	0	0	0	0	6
NE	6	0	0	0	0	0	6
ENE	6	0	0	0	0	0	6
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	1	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	2	0	0	0	0	0	2
SSW	2	0	0	0	0	0	2
SW	1	0	0	0	0	0	1
WSW	7	0	0	0	0	0	7
W	30	0	0	0	0	0	30
WNW	49	0	0	0	0	0	49
NW	46	0	0	0	0	0	46
NNW	26	0	0	0	0	0	26
Variable	0	0	0	0	0	0	0
Total	194	0	0	0	0	0	194

Hours of calm in this stability class: 31
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 40

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, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	7	10	1	0	0	18
NNE	2	6	7	1	0	0	16
NE	0	8	1	1	0	0	10
ENE	1	4	0	0	0	0	5
E	0	2	0	0	0	0	2
ESE	1	3	1	1	0	0	6
SE	0	2	5	1	0	0	8
SSE	2	3	8	1	0	0	14
S	1	10	9	1	0	0	21
SSW	1	13	27	5	0	0	46
SW	0	15	24	5	0	0	44
WSW	0	17	29	6	0	0	52
W	2	24	30	15	10	0	81
WNW	4	19	21	8	2	0	54
NW	0	12	24	20	1	0	57
NNW	0	6	9	6	0	0	21
Variable	0	0	0	0	0	0	0
Total	14	151	205	72	13	0	455

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: 40

Table D – 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	1	3	0	0	0	4
NNE	0	3	0	1	0	0	4
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	2	4	0	0	0	6
SE	0	0	0	0	0	0	0
SSE	1	1	0	1	0	0	3
S	0	3	1	0	0	0	4
SSW	0	3	7	0	0	0	10
SW	1	3	4	1	0	0	9
WSW	2	2	6	0	0	0	10
W	1	2	3	0	0	0	6
WNW	3	5	3	4	0	0	15
NW	0	4	15	9	0	0	28
NNW	1	1	5	4	0	0	11
Variable	0	0	0	0	0	0	0
Total	9	31	51	20	0	0	111

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: 40

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, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	4	4	2	0	0	10
NNE	0	4	0	0	0	0	4
NE	2	2	3	0	0	0	7
ENE	1	3	0	1	0	0	5
E	1	2	4	0	0	0	7
ESE	1	3	1	0	0	0	5
SE	0	1	0	0	0	0	1
SSE	1	1	0	0	0	0	2
S	0	2	0	0	0	0	2
SSW	2	3	4	0	0	0	9
SW	2	3	3	1	0	0	9
WSW	0	2	2	1	0	0	5
W	1	2	5	1	1	0	10
WNW	2	3	2	6	1	0	14
NW	0	1	10	11	2	0	24
NNW	1	2	2	3	0	0	8
Variable	0	0	0	0	0	0	0
Total	14	38	40	26	4	0	122

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: 40

Table D – 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	7	15	11	5	0	0	38
NNE	3	13	2	3	0	0	21
NE	6	10	14	0	0	0	30
ENE	6	8	10	0	0	0	24
E	6	6	26	5	0	0	43
ESE	4	5	7	2	0	0	18
SE	1	6	5	0	0	0	12
SSE	2	4	15	9	0	0	30
S	4	23	22	6	0	0	55
SSW	1	8	14	4	0	0	27
SW	2	7	9	1	0	0	19
WSW	2	6	7	0	0	0	15
W	3	8	7	0	0	0	18
WNW	3	13	20	6	1	0	43
NW	6	11	22	14	3	0	56
NNW	3	7	17	5	0	0	32
Variable	0	0	0	0	0	0	0
Total	59	150	208	60	4	0	481

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: 40

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, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	7	9	1	0	0	22
NNE	1	3	3	1	0	0	8
NE	7	5	4	0	0	0	16
ENE	6	8	6	1	0	0	21
E	8	11	1	0	0	0	20
ESE	4	7	3	1	0	0	15
SE	4	10	19	3	0	0	36
SSE	2	7	9	2	4	2	26
S	0	9	37	5	2	0	53
SSW	0	16	32	9	1	0	58
SW	0	22	20	3	0	0	45
WSW	2	9	10	1	0	0	22
W	2	8	15	2	0	0	27
WNW	5	33	43	1	0	0	82
NW	2	29	6	2	0	0	39
NNW	1	13	11	1	0	0	26
Variable	0	0	0	0	0	0	0
Total	49	197	228	33	7	2	516

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: 40

Table D – 6 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, July - September, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	2	3	0	0	0	7
NNE	4	3	1	0	0	0	8
NE	3	2	1	0	0	0	6
ENE	3	9	1	0	0	0	13
E	4	0	1	0	0	0	5
ESE	6	0	0	0	0	0	6
SE	1	1	0	0	0	0	2
SSE	3	0	0	0	0	0	3
S	3	5	1	1	0	0	10
SSW	2	3	9	3	0	0	17
SW	3	4	6	0	0	0	13
WSW	1	13	5	0	0	0	19
W	5	13	4	0	0	0	22
WNW	4	33	17	1	0	0	55
NW	5	38	11	0	0	0	54
NNW	2	5	8	0	0	0	15
Variable	2	0	0	0	0	0	2
Total	53	131	68	5	0	0	257

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: 40

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, 2010

Limerick Tower 1

Period of Record: July - September 2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	2	0	0	0	0	7
NNE	3	3	0	0	0	0	6
NE	5	5	1	0	0	0	11
ENE	1	1	0	0	0	0	2
E	1	0	0	0	0	0	1
ESE	3	2	0	0	0	0	5
SE	1	1	0	0	0	0	2
SSE	1	0	0	0	0	0	1
S	1	1	0	0	0	0	2
SSW	3	4	1	0	0	0	8
SW	4	1	0	0	0	0	5
WSW	2	4	0	0	0	0	6
W	2	14	2	0	0	0	18
WNW	9	55	18	0	0	0	82
NW	5	42	10	0	0	0	57
NNW	1	10	0	0	0	0	11
Variable	0	0	0	0	0	0	0
Total	47	145	32	0	0	0	224

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: 40

Table D – 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

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

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

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	5	0	0	0	0	5
NNE	2	1	0	0	0	0	3
NE	0	0	1	0	0	0	1
ENE	0	2	1	0	0	0	3
E	1	0	0	0	0	0	1
ESE	0	1	0	0	0	0	1
SE	0	1	0	0	0	0	1
SSE	0	2	0	0	0	0	2
S	0	2	0	0	0	0	2
SSW	0	1	0	0	0	0	1
SW	0	0	0	0	0	0	0
WSW	1	5	0	0	0	0	6
W	2	3	2	0	0	0	7
WNW	1	5	2	2	0	0	10
NW	0	10	4	3	0	0	17
NNW	0	1	1	0	0	0	2
Variable	0	0	0	0	0	0	0
Total	7	39	11	5	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: 6

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	1	0	0	0	3
NNE	1	2	0	0	0	0	3
NE	1	2	1	0	0	0	4
ENE	1	0	2	0	0	0	3
E	2	1	0	0	0	0	3
ESE	1	2	0	0	0	0	3
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	4	1	0	0	0	5
SSW	0	4	0	0	0	0	4
SW	1	3	0	0	0	0	4
WSW	1	2	2	0	0	0	5
W	2	8	5	0	0	0	15
WNW	4	6	16	8	0	0	34
NW	1	7	27	22	1	0	58
NNW	1	5	11	0	0	0	17
Variable	0	0	0	0	0	0	0
Total	16	48	66	30	1	0	161

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

Table D – 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	8	9	10	0	0	0	27
NNE	3	7	7	0	0	0	17
NE	9	7	1	0	0	0	17
ENE	6	7	1	0	0	0	14
E	8	14	10	1	0	0	33
ESE	5	2	0	2	0	0	9
SE	7	5	0	0	0	0	12
SSE	3	6	5	1	0	0	15
S	9	9	8	0	0	0	26
SSW	11	12	4	1	0	0	28
SW	7	2	0	0	0	0	9
WSW	15	3	1	0	0	0	19
W	15	29	27	3	0	0	74
WNW	13	88	97	16	0	0	214
NW	9	83	151	106	17	1	367
NNW	14	17	28	15	1	0	75
Variable	3	0	0	0	0	0	3
Total	145	300	350	145	18	1	959

Hours of calm in this stability class: 2
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 6

Table D – 7 Wind Speed by Direction Measured at 30 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	19	9	0	0	0	0	28
NNE	7	11	0	0	0	0	18
NE	5	1	0	0	0	0	6
ENE	6	4	0	0	0	0	10
E	2	4	7	0	0	0	13
ESE	4	0	12	0	0	0	16
SE	10	1	6	4	0	0	21
SSE	4	1	1	0	0	0	6
S	14	15	6	0	0	0	35
SSW	15	19	2	0	0	0	36
SW	15	4	0	0	0	0	19
WSW	16	11	2	0	0	0	29
W	36	50	4	0	0	0	90
WNW	32	70	11	0	0	0	113
NW	18	29	5	0	0	0	52
NNW	18	14	0	0	0	0	32
Variable	3	0	0	0	0	0	3
Total	224	243	56	4	0	0	527

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

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	10	3	0	0	0	0	13
NNE	2	6	0	0	0	0	8
NE	2	1	0	0	0	0	3
ENE	2	0	0	0	0	0	2
E	4	0	0	0	0	0	4
ESE	3	0	0	0	0	0	3
SE	3	0	0	0	0	0	3
SSE	3	1	0	0	0	0	4
S	4	1	0	0	0	0	5
SSW	10	4	0	0	0	0	14
SW	11	0	0	0	0	0	11
WSW	13	0	0	0	0	0	13
W	25	3	0	0	0	0	28
WNW	30	9	0	0	0	0	39
NW	9	3	0	0	0	0	12
NNW	9	0	0	0	0	0	9
Variable	1	0	0	0	0	0	1
Total	141	31	0	0	0	0	172

Hours of calm in this stability class: 4
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 6

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	22	0	0	0	0	0	22
NNE	10	0	0	0	0	0	10
NE	7	0	0	0	0	0	7
ENE	4	0	0	0	0	0	4
E	7	0	0	0	0	0	7
ESE	2	0	0	0	0	0	2
SE	2	0	0	0	0	0	2
SSE	1	0	0	0	0	0	1
S	6	0	0	0	0	0	6
SSW	5	0	0	0	0	0	5
SW	7	0	0	0	0	0	7
WSW	14	0	0	0	0	0	14
W	57	0	0	0	0	0	57
WNW	44	0	0	0	0	0	44
NW	35	0	0	0	0	0	35
NNW	31	0	0	0	0	0	31
Variable	4	0	0	0	0	0	4
Total	258	0	0	0	0	0	258

Hours of calm in this stability class: 17
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 6

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

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

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

Table D – 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

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

Table D – 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	4	0	0	0	6
NNE	0	0	1	0	0	0	1
NE	1	2	1	1	0	0	5
ENE	1	1	1	1	0	0	4
E	1	0	1	0	0	0	2
ESE	1	2	0	0	0	0	3
SE	1	1	0	0	0	0	2
SSE	0	0	0	0	0	0	0
S	0	0	3	0	0	0	3
SSW	0	1	5	1	0	0	7
SW	1	2	0	0	0	0	3
WSW	0	1	2	0	1	0	4
W	0	4	6	4	2	0	16
WNW	1	3	11	15	13	1	44
NW	0	2	8	20	10	2	42
NNW	1	1	8	8	0	0	18
Variable	0	0	0	0	0	0	0
Total	8	22	51	50	26	3	160

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

Table D – 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	6	19	8	0	0	35
NNE	7	4	8	4	0	0	23
NE	6	3	6	1	0	0	16
ENE	10	6	6	1	0	0	23
E	4	7	2	3	0	0	16
ESE	6	4	10	5	3	0	28
SE	4	5	1	0	0	0	10
SSE	6	2	7	2	2	1	20
S	4	7	8	6	1	0	26
SSW	2	5	8	4	2	1	22
SW	6	3	2	4	0	0	15
WSW	8	6	6	1	0	0	21
W	4	8	12	15	3	2	44
WNW	3	12	65	102	54	3	239
NW	6	16	95	95	71	24	307
NNW	6	4	41	37	22	1	111
Variable	0	0	0	0	0	0	0
Total	84	98	296	288	158	32	956

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

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	6	8	10	0	0	0	24
NNE	5	5	12	2	0	0	24
NE	4	4	7	0	0	0	15
ENE	6	3	2	0	0	0	11
E	4	6	4	1	0	0	15
ESE	4	3	2	7	0	0	16
SE	1	0	0	12	6	0	19
SSE	1	2	1	1	3	1	9
S	5	5	8	5	1	0	24
SSW	2	13	16	9	0	0	40
SW	4	13	8	4	0	0	29
WSW	3	3	12	2	2	0	22
W	6	14	37	7	1	0	65
WNW	1	22	74	21	2	0	120
NW	2	18	42	9	0	0	71
NNW	3	5	16	0	0	0	24
Variable	0	0	0	0	0	0	0
Total	57	124	251	80	15	1	528

Hours of calm in this stability class: 1
Hours of missing wind measurements in this stability class: 3
Hours of missing stability measurements in all stability classes: 6

Table D – 8 Wind Speed by Direction Measured at 175 Feet for Various Stability Classes for the Limerick Generating Station, October - December, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Moderately Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	2	4	0	0	0	8
NNE	2	1	6	2	0	0	11
NE	0	1	2	0	0	0	3
ENE	0	0	0	0	0	0	0
E	2	0	1	0	0	0	3
ESE	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	2	0	0	0	0	2
S	1	6	4	0	0	0	11
SSW	0	3	6	0	0	0	9
SW	0	7	5	0	0	0	12
WSW	2	4	4	0	0	0	10
W	1	9	6	0	0	0	16
WNW	0	12	25	3	0	0	40
NW	4	9	13	0	0	0	26
NNW	6	5	5	0	0	0	16
Variable	1	0	0	0	0	0	1
Total	21	62	81	5	0	0	169

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

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, 2010

Limerick Tower 1

Period of Record: October - December2010
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Direction	Wind Speed (in mph) 1-3	4-7	8-12	13-18	19-24	> 24	Total
N	5	5	4	0	0	0	14
NNE	3	8	4	0	0	0	15
NE	4	4	0	0	0	0	8
ENE	3	0	0	0	0	0	3
E	4	0	0	0	0	0	4
ESE	3	1	0	0	0	0	4
SE	1	1	0	0	0	0	2
SSE	1	0	0	0	0	0	1
S	1	5	1	0	0	0	7
SSW	4	13	4	0	0	0	21
SW	3	6	1	0	0	0	10
WSW	4	5	3	0	0	0	12
W	4	16	3	0	0	0	23
WNW	9	32	26	0	0	0	67
NW	12	20	24	2	0	0	58
NNW	4	8	5	0	0	0	17
Variable	1	0	0	0	0	0	1
Total	66	124	75	2	0	0	267

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

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, 2010

Limerick Tower 1
30 ft. Wind Speed and Direction

January-December, 2010
171Ft-26Ft Delta-T (F)

Number of Observations = 8551
Values are Percent Occurrence

SPEED CLASS	WIND DIRECTION CLASSES N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	STABILITY CLASSES 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	0.02	0.02							
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						
C 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	0.00	0.00	0.00	0.00			0.00					
A 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	0.00	0.00	0.00	0.04				0.04				
L 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	0.12					0.12			
M 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	0.16						0.16		
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	0.09							0.09	
																									0.43
EU	0.02	0.04	0.06	0.05	0.11	0.04	0.15	0.23	0.20	0.16	0.22	0.18	0.29	0.26	0.14	0.11	2.25	2.25							
MU	0.00	0.06	0.01	0.02	0.07	0.05	0.02	0.01	0.05	0.04	0.07	0.09	0.08	0.05	0.05	0.00	0.67		0.67						
1 SU	0.04	0.06	0.06	0.05	0.04	0.07	0.01	0.06	0.04	0.08	0.05	0.06	0.08	0.15	0.08	0.04	0.95			0.95					
- N	0.46	0.28	0.44	0.40	0.44	0.25	0.25	0.20	0.36	0.36	0.37	0.51	0.57	0.68	0.44	0.50	6.53				6.53				
3 SS	0.47	0.26	0.32	0.34	0.19	0.21	0.34	0.18	0.54	0.63	0.96	1.06	1.70	1.47	0.70	0.57	9.93					9.93			
MS	0.44	0.19	0.14	0.12	0.11	0.12	0.06	0.11	0.15	0.34	0.56	0.85	1.39	1.49	0.98	0.41	7.45						7.45		
ES	0.61	0.29	0.30	0.18	0.12	0.06	0.05	0.02	0.12	0.11	0.22	0.43	1.45	1.79	1.49	0.91	8.14							8.14	
																									35.90
EU	0.33	0.18	0.18	0.18	0.43	0.32	0.22	0.26	0.49	0.87	0.80	1.03	1.32	1.26	1.29	0.34	9.47	9.47							
MU	0.13	0.04	0.04	0.07	0.08	0.07	0.01	0.04	0.11	0.14	0.12	0.15	0.21	0.28	0.34	0.09	1.91		1.91						
4 SU	0.14	0.06	0.12	0.20	0.14	0.05	0.00	0.01	0.12	0.14	0.15	0.11	0.26	0.25	0.26	0.16	2.15			2.15					
- N	0.67	0.48	0.76	1.18	0.77	0.32	0.30	0.53	0.68	0.56	0.19	0.20	1.01	2.29	2.69	0.84	13.46				13.46				
7 SS	0.33	0.29	0.09	0.20	0.25	0.35	0.19	0.44	1.11	0.81	0.13	0.36	1.40	1.86	0.83	0.46	9.10					9.10			
MS	0.08	0.12	0.05	0.01	0.00	0.00	0.05	0.02	0.07	0.23	0.02	0.05	0.13	0.37	0.11	0.02	1.33						1.33		
ES	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.01	0.08							0.08	
																									37.50
EU	0.13	0.06	0.05	0.01	0.04	0.11	0.07	0.02	0.20	0.12	0.07	0.11	0.44	0.76	1.31	0.35	3.84	3.84							
MU	0.08	0.02	0.01	0.02	0.02	0.01	0.00	0.00	0.02	0.02	0.00	0.02	0.12	0.29	0.76	0.09	1.51		1.51						
8 SU	0.09	0.01	0.01	0.04	0.04	0.04	0.00	0.00	0.01	0.02	0.02	0.04	0.14	0.54	0.89	0.21	2.09			2.09					
- N	0.53	0.28	0.15	0.40	0.35	0.14	0.05	0.19	0.25	0.08	0.02	0.01	0.71	2.39	4.23	0.78	10.56				10.56				
1 SS	0.05	0.00	0.00	0.01	0.11	0.16	0.12	0.08	0.14	0.05	0.01	0.04	0.06	0.32	0.30	0.01	1.45					1.45			
2 MS	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02						0.02		
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	
																									19.47
EU	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.09	0.64	0.14	0.92	0.92							
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	0.08	0.25	0.01	0.34		0.34						
3 SU	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.57	0.04	0.81			0.81					
- N	0.00	0.00	0.00	0.16	0.06	0.02	0.01	0.04	0.00	0.01	0.00	0.00	0.13	0.49	2.26	0.25	3.43				3.43				
1 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.23					0.23			
8 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	0.05	0.00	0.05						0.05		
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	
																									5.78

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, 2010

Limerick Tower 1
30 ft. Wind Speed and Direction

January-December, 2010
171Ft-26Ft Delta-T (F)

SPEED CLASS	WIND DIRECTION CLASSES N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	STABILITY CLASSES 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							
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	0.02	0.00	0.02		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	0.00	0.00	0.07	0.00	0.07			0.07					
- N	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.01	0.35				0.35				
2 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02					0.02			
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	
																									0.47
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							
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	0.00	0.00	0.00	0.00			0.00					
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	0.00	0.01	0.00	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	
																									0.01
TOT	4.60	2.71	2.78	3.64	3.39	2.37	2.01	2.49	4.65	4.77	3.99	5.30	11.51	17.40	21.16	6.36	99.57	16.50	4.44	6.07	34.37	20.85	9.02	8.31	99.57

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.49	0.27	0.28	0.23	0.57	0.47	0.44	0.51	0.90	1.15	1.09	1.31	2.07	2.37	3.38	0.94	16.50	Extremely Unstable
0.21	0.12	0.06	0.12	0.18	0.13	0.04	0.05	0.18	0.20	0.19	0.27	0.41	0.70	1.42	0.20	4.44	Moderately Unstable
0.27	0.13	0.19	0.29	0.21	0.15	0.01	0.07	0.16	0.25	0.22	0.20	0.48	1.12	1.87	0.44	6.07	Slightly Unstable
1.65	1.04	1.36	2.14	1.65	0.73	0.61	0.96	1.29	1.02	0.58	0.73	2.42	5.85	9.94	2.39	34.37	Neutral
0.84	0.55	0.41	0.55	0.54	0.73	0.76	0.75	1.79	1.49	1.10	1.46	3.16	3.70	1.88	1.04	20.85	Slightly Stable
0.53	0.30	0.19	0.13	0.12	0.12	0.11	0.13	0.22	0.57	0.58	0.90	1.52	1.86	1.15	0.43	9.02	Moderately Stable
0.61	0.30	0.30	0.18	0.13	0.06	0.05	0.02	0.12	0.11	0.22	0.43	1.45	1.80	1.52	0.92	8.31	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	0.43	C A L M
2.03	1.17	1.33	1.15	1.06	0.78	0.88	0.81	1.45	1.72	2.46	3.19	5.57	5.88	3.88	2.54	35.90	< 3.5 mph
1.67	1.17	1.23	1.84	1.68	1.10	0.77	1.30	2.57	2.75	1.40	1.89	4.33	6.33	5.54	1.93	37.50	3.6 - 7.5 mph
0.88	0.37	0.22	0.48	0.56	0.46	0.23	0.29	0.62	0.29	0.13	0.21	1.47	4.29	7.51	1.45	19.47	7.6 - 12.5 mph
0.01	0.00	0.00	0.18	0.06	0.04	0.13	0.06	0.01	0.01	0.00	0.00	0.14	0.90	3.81	0.43	5.78	12.6 - 18.5 mph
0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.01	0.47	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	0.01	0.00	0.01	> 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, 2010

Limerick Tower 1
175 ft. Wind Speed and Direction

January-December, 2010
171Ft-26Ft Delta-T (F)

Number of Observations = 8658
Values are Percent Occurrence

SPEED CLASS	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							
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						
C 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	0.00	0.00	0.00	0.00			0.00					
A 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	0.00	0.00	0.00	0.00				0.00				
L 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			
M 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	0.03						0.03		
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	0.01							0.01	
																									0.05
EU	0.01	0.07	0.03	0.02	0.06	0.06	0.06	0.10	0.10	0.06	0.06	0.08	0.10	0.08	0.05	0.00	0.95	0.95							
MU	0.00	0.00	0.03	0.02	0.02	0.05	0.01	0.02	0.01	0.01	0.03	0.02	0.03	0.03	0.00	0.01	0.32		0.32						
1 SU	0.01	0.01	0.06	0.05	0.02	0.02	0.01	0.02	0.00	0.03	0.03	0.02	0.01	0.05	0.00	0.02	0.38			0.38					
- N	0.21	0.24	0.24	0.25	0.20	0.15	0.10	0.12	0.10	0.06	0.14	0.13	0.12	0.10	0.18	0.18	2.53				2.53				
3 SS	0.14	0.08	0.16	0.17	0.17	0.09	0.10	0.06	0.07	0.02	0.06	0.07	0.12	0.09	0.06	0.06	1.52					1.52			
MS	0.09	0.12	0.05	0.06	0.07	0.10	0.05	0.08	0.05	0.02	0.06	0.09	0.10	0.06	0.13	0.13	1.25						1.25		
ES	0.16	0.10	0.14	0.12	0.10	0.14	0.07	0.09	0.02	0.10	0.14	0.15	0.16	0.36	0.31	0.07	2.24							2.24	
																									9.19
EU	0.15	0.12	0.14	0.17	0.30	0.21	0.20	0.22	0.23	0.31	0.49	0.37	0.58	0.57	0.36	0.17	4.57	4.57							
MU	0.03	0.07	0.02	0.05	0.05	0.06	0.02	0.01	0.08	0.05	0.06	0.05	0.10	0.13	0.13	0.02	0.92		0.92						
4 SU	0.09	0.07	0.09	0.09	0.05	0.09	0.02	0.05	0.03	0.08	0.06	0.06	0.10	0.20	0.03	0.03	1.16			1.16					
- N	0.42	0.42	0.35	0.66	0.51	0.25	0.22	0.24	0.52	0.23	0.22	0.30	0.32	0.60	0.55	0.29	6.10				6.10				
7 SS	0.29	0.12	0.17	0.25	0.25	0.23	0.29	0.17	0.33	0.57	0.73	0.51	0.61	0.98	0.65	0.27	6.42					6.42			
MS	0.16	0.09	0.06	0.13	0.05	0.03	0.06	0.05	0.17	0.13	0.36	0.42	0.54	0.90	0.83	0.21	4.18						4.18		
ES	0.17	0.23	0.12	0.03	0.03	0.06	0.02	0.01	0.09	0.21	0.16	0.23	0.65	1.52	1.05	0.43	5.02							5.02	
																									28.38
EU	0.27	0.14	0.08	0.03	0.12	0.14	0.09	0.21	0.27	0.64	0.53	0.76	0.98	0.97	0.89	0.28	6.39	6.39							
MU	0.15	0.02	0.00	0.07	0.01	0.07	0.01	0.00	0.05	0.14	0.07	0.17	0.12	0.20	0.28	0.13	1.48		1.48						
8 SU	0.15	0.01	0.08	0.13	0.13	0.02	0.00	0.01	0.07	0.14	0.08	0.07	0.21	0.29	0.39	0.14	1.92			1.92					
- N	0.89	0.50	0.57	0.98	0.72	0.33	0.16	0.52	0.54	0.44	0.24	0.31	0.54	1.93	2.52	1.41	12.60				12.60				
1 SS	0.46	0.25	0.18	0.14	0.17	0.09	0.29	0.27	0.89	0.94	0.53	0.54	0.97	2.43	1.04	0.54	9.74					9.74			
2 MS	0.18	0.14	0.05	0.02	0.05	0.01	0.01	0.00	0.08	0.28	0.27	0.32	0.29	1.02	0.55	0.22	3.49						3.49		
ES	0.07	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.03	0.07	0.08	0.85	0.50	0.12	1.88							1.88	
																									37.49
EU	0.06	0.01	0.02	0.01	0.00	0.06	0.08	0.01	0.09	0.14	0.16	0.23	0.70	0.75	0.69	0.24	3.27	3.27							
1 MU	0.02	0.05	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.02	0.02	0.05	0.16	0.31	0.46	0.12	1.25		1.25						
3 SU	0.06	0.03	0.01	0.03	0.00	0.02	0.00	0.00	0.01	0.01	0.02	0.03	0.15	0.52	0.53	0.17	1.62			1.62					
- N	0.33	0.20	0.10	0.22	0.18	0.21	0.02	0.17	0.21	0.14	0.09	0.02	0.47	2.75	2.55	0.89	8.57				8.57				
1 SS	0.03	0.03	0.00	0.01	0.06	0.10	0.22	0.06	0.20	0.27	0.13	0.07	0.20	0.77	0.32	0.05	2.52					2.52			
8 MS	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.09	0.00	0.00	0.02	0.09	0.01	0.00	0.29						0.29		
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	0.03	0.03	0.00	0.07							0.07	
																									17.58

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, 2010

Limerick Tower 1
175 ft. Wind Speed and Direction

January-December, 2010
171Ft-26Ft Delta-T (F)

SPEED	WIND DIRECTION CLASSES																	STABILITY CLASSES							
CLASS	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	0.01	0.02	0.05	0.05	0.22	0.35	0.32	0.03	1.05	1.05							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.23	0.13	0.00	0.37		0.37						
9 SU	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.37	0.28	0.02	0.76			0.76					
- N	0.00	0.00	0.01	0.14	0.01	0.03	0.00	0.03	0.05	0.03	0.00	0.00	0.06	1.40	1.37	0.25	3.40				3.40				
2 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.13	0.03	0.01	0.01	0.03	0.02	0.06	0.06	0.00	0.43					0.43			
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	0.06	0.00	0.06						0.06		
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	
																									6.06
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	0.06	0.01	0.00	0.00	0.07	0.07							
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	0.01	0.00	0.03	0.00	0.05		0.05						
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	0.05	0.10	0.00	0.15			0.15					
N	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05	0.21	0.45	0.82				0.82				
2 SS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.12					0.12			
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	
																									1.20
TOT	4.62	3.21	2.80	3.89	3.38	2.66	2.19	2.78	4.37	5.26	4.84	5.27	8.92	21.30	17.91	6.51	99.95	16.30	4.39	5.98	34.01	20.74	9.30	9.23	99.95

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.49	0.33	0.28	0.24	0.47	0.46	0.43	0.54	0.70	1.17	1.28	1.49	2.64	2.73	2.31	0.73	16.30	Extremely Unstable
0.21	0.14	0.06	0.14	0.08	0.18	0.05	0.05	0.15	0.22	0.18	0.30	0.43	0.90	1.03	0.28	4.39	Moderately Unstable
0.31	0.13	0.24	0.31	0.20	0.16	0.03	0.08	0.12	0.27	0.21	0.21	0.52	1.47	1.34	0.39	5.98	Slightly Unstable
1.85	1.35	1.27	2.26	1.65	0.98	0.51	1.13	1.42	0.91	0.69	0.76	1.56	6.99	7.63	3.04	34.01	Neutral
0.92	0.49	0.52	0.58	0.66	0.52	0.97	0.75	1.52	1.80	1.46	1.22	1.92	4.38	2.13	0.91	20.74	Slightly Stable
0.44	0.37	0.15	0.21	0.18	0.15	0.12	0.13	0.32	0.52	0.68	0.83	0.96	2.07	1.58	0.55	9.30	Moderately Stable
0.40	0.40	0.28	0.15	0.14	0.20	0.09	0.10	0.13	0.37	0.33	0.45	0.89	2.77	1.89	0.61	9.23	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	0.05	C A L M
0.62	0.62	0.72	0.69	0.65	0.61	0.40	0.50	0.36	0.31	0.52	0.57	0.65	0.77	0.73	0.47	9.19	< 3.5 mph
1.32	1.11	0.95	1.39	1.24	0.94	0.83	0.75	1.47	1.57	2.07	1.93	2.91	4.90	3.60	1.42	28.38	3.6 - 7.5 mph
2.17	1.13	0.98	1.37	1.19	0.67	0.57	1.00	1.91	2.62	1.76	2.25	3.19	7.68	6.17	2.83	37.49	7.6 - 12.5 mph
0.51	0.35	0.14	0.28	0.27	0.40	0.32	0.25	0.54	0.67	0.43	0.40	1.71	5.23	4.61	1.47	17.58	12.6 - 18.5 mph
0.00	0.00	0.01	0.15	0.01	0.03	0.07	0.16	0.09	0.07	0.07	0.12	0.35	2.40	2.22	0.31	6.06	18.6 - 24.5 mph
0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.12	0.00	0.01	0.00	0.00	0.12	0.31	0.59	0.01	1.20	> 24.5 mph

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

Table D – 11 Annual x/Q and D/Q values for the North Stack, Limerick Generating Station, 2010

Limerick Generating Station
x/Q and D/Q values

North Stack - Flow = 251200 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
N	Site Boundary	S	762	1.73E-07	2.13E-09
N	Site Boundary	SSW	762	1.03E-07	1.07E-09
N	Site Boundary	SW	884	7.26E-08	7.89E-10
N	Site Boundary	WSW	854	1.43E-07	1.58E-09
N	Site Boundary	W	854	1.26E-07	1.61E-09
N	Site Boundary	WNW	793	1.03E-07	1.34E-09
N	Site Boundary	NW	762	9.15E-08	1.20E-09
N	Site Boundary	NNW	884	1.02E-07	1.31E-09
N	Site Boundary	N	884	1.67E-07	2.08E-09
N	Site Boundary	NNE	793	1.78E-07	2.26E-09
N	Site Boundary	NE	793	1.05E-07	1.65E-09
N	Site Boundary	ENE	793	1.32E-07	2.06E-09
N	Site Boundary	E	762	4.02E-07	5.26E-09
N	Site Boundary	ESE	762	8.59E-07	1.12E-08
N	Site Boundary	SE	762	1.39E-06	2.28E-08
N	Site Boundary	SSE	1006	1.81E-07	2.70E-09
N	RR-Inf-Lck-NG	S	300	7.27E-07	6.89E-09
N	RR-Inf-Lck-NG	SSW	225	7.51E-07	5.09E-09
N	RR-Inf-Lck-NG	SW	225	6.30E-07	4.05E-09
N	RR-Inf-Lck-NG	WSW	345	5.51E-07	5.44E-09
N	RR-Inf-Lck-NG	W	225	1.01E-06	8.07E-09
N	RR-Inf-Lck-NG	WNW	345	3.71E-07	3.74E-09
N	RR-Inf-Lck-NG	NW	450	2.03E-07	2.31E-09
N	RR-Inf-Lck-NG	ESE	884	6.96E-07	9.05E-09
N	RR-Inf-Lck-NG	WSW	450	3.49E-07	3.81E-09
N	RR-Inf-Lck-NG	NNE	682	2.23E-07	2.70E-09
N	Inhalation	N	948	1.52E-07	1.90E-09
N	Inhalation	NNE	825	1.68E-07	2.16E-09
N	Inhalation	NE	1057	6.90E-08	1.20E-09
N	Inhalation	ENE	985	9.78E-08	1.61E-09
N	Inhalation	E	873	3.33E-07	4.42E-09
N	Inhalation	ESE	1047	5.47E-07	7.14E-09
N	Inhalation	SE	1557	5.07E-07	7.79E-09
N	Inhalation	SSE	1647	9.50E-08	1.39E-09
N	Inhalation	S	1325	8.24E-08	1.06E-09
N	Inhalation	SSW	1543	4.05E-08	4.76E-10
N	Inhalation	SW	991	6.17E-08	6.98E-10
N	Inhalation	WSW	1158	9.41E-08	1.08E-09
N	Inhalation	W	1105	8.88E-08	1.19E-09
N	Inhalation	WNW	1198	5.84E-08	7.86E-10

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

Table D – 11 Annual x/Q and D/Q values for the North Stack, Limerick Generating Station, 2010

Limerick Generating Station
x/Q and D/Q values

North Stack - Flow = 251200 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
N	Inhalation	NW	1104	5.47E-08	7.50E-10
N	Inhalation	NNW	1540	4.74E-08	6.46E-10
N	Vegetation	N	2867	5.26E-08	4.03E-10
N	Vegetation	NNE	2929	4.94E-08	3.77E-10
N	Vegetation	NE	5416	3.27E-08	1.18E-10
N	Vegetation	ENE	4372	4.37E-08	1.92E-10
N	Vegetation	E	3849	9.77E-08	5.46E-10
N	Vegetation	ESE	555	1.36E-06	1.74E-08
N	Vegetation	SE	390	3.72E-06	6.05E-08
N	Vegetation	SSE	2102	7.46E-08	9.73E-10
N	Vegetation	S	1860	5.70E-08	6.91E-10
N	Vegetation	SSW	1622	3.85E-08	4.47E-10
N	Vegetation	SW	1572	3.50E-08	4.65E-10
N	Vegetation	WSW	3662	3.74E-08	2.71E-10
N	Vegetation	W	1283	7.30E-08	1.00E-09
N	Vegetation	WNW	1198	5.84E-08	7.86E-10
N	Vegetation	NW	2490	2.40E-08	2.42E-10
N	Vegetation	NNW	2666	3.00E-08	2.88E-10
N	Meat	N	7565	3.07E-08	9.35E-11
N	Meat	ENE	6264	4.11E-08	1.10E-10
N	Meat	SE	3331	2.12E-07	2.35E-09
N	Meat	S	3722	3.73E-08	2.66E-10
N	Meat	SSW	3145	2.47E-08	1.92E-10
N	Meat	SW	5653	2.04E-08	9.61E-11
N	Meat	WSW	4336	3.41E-08	2.15E-10
N	Meat	W	4467	2.83E-08	1.95E-10
N	Cow	N	7565	3.07E-08	9.35E-11
N	Cow	S	6781	2.82E-08	1.07E-10
N	Cow	SSW	3145	2.47E-08	1.92E-10
N	Cow	WSW	4336	3.41E-08	2.15E-10
N	Cow	W	4467	2.83E-08	1.95E-10

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

Table D – 12 Annual x/Q and D/Q values for the Sout Stack, Limerick Generating Station, 2010

Limerick Generating Station
x/Q and D/Q values

South Stack - Flow = 177200 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
S	Site Boundary	S	762	6.33E-08	1.26E-09
S	Site Boundary	SSW	762	3.67E-08	6.29E-10
S	Site Boundary	SW	884	2.61E-08	5.26E-10
S	Site Boundary	WSW	854	5.54E-08	8.82E-10
S	Site Boundary	W	854	5.43E-08	1.08E-09
S	Site Boundary	WNW	793	3.84E-08	8.21E-10
S	Site Boundary	NW	762	3.36E-08	7.32E-10
S	Site Boundary	NNW	884	4.40E-08	8.52E-10
S	Site Boundary	N	884	6.72E-08	1.41E-09
S	Site Boundary	NNE	793	7.06E-08	1.61E-09
S	Site Boundary	NE	793	4.41E-08	1.30E-09
S	Site Boundary	ENE	793	5.35E-08	1.64E-09
S	Site Boundary	E	762	1.51E-07	3.43E-09
S	Site Boundary	ESE	762	3.12E-07	5.92E-09
S	Site Boundary	SE	762	5.61E-07	1.19E-08
S	Site Boundary	SSE	1006	7.94E-08	1.65E-09
S	RR-Inf-Lck-NG	S	300	2.20E-07	2.82E-09
S	RR-Inf-Lck-NG	SSW	225	2.33E-07	1.99E-09
S	RR-Inf-Lck-NG	SW	225	1.86E-07	1.64E-09
S	RR-Inf-Lck-NG	WSW	345	1.95E-07	2.44E-09
S	RR-Inf-Lck-NG	W	225	3.46E-07	3.56E-09
S	RR-Inf-Lck-NG	WNW	345	1.14E-07	1.64E-09
S	RR-Inf-Lck-NG	NW	450	6.40E-08	1.19E-09
S	RR-Inf-Lck-NG	ESE	884	2.60E-07	5.02E-09
S	RR-Inf-Lck-NG	WSW	450	1.27E-07	1.82E-09
S	RR-Inf-Lck-NG	NNE	682	8.81E-08	1.85E-09
S	Inhalation	N	948	6.16E-08	1.32E-09
S	Inhalation	NNE	825	6.65E-08	1.56E-09
S	Inhalation	NE	1057	2.97E-08	9.93E-10
S	Inhalation	ENE	985	4.15E-08	1.33E-09
S	Inhalation	E	873	1.28E-07	2.99E-09
S	Inhalation	ESE	1047	2.12E-07	4.19E-09
S	Inhalation	SE	1557	2.56E-07	5.13E-09
S	Inhalation	SSE	1647	4.96E-08	1.01E-09
S	Inhalation	S	1325	3.56E-08	7.59E-10
S	Inhalation	SSW	1543	1.75E-08	3.60E-10
S	Inhalation	SW	991	2.24E-08	4.85E-10
S	Inhalation	WSW	1158	3.83E-08	6.85E-10
S	Inhalation	W	1105	3.97E-08	8.50E-10
S	Inhalation	WNW	1198	2.30E-08	5.41E-10
S	Inhalation	NW	1104	2.04E-08	5.02E-10

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

Table D – 12 Annual x/Q and D/Q values for the Sout Stack, Limerick Generating Station, 2010

Limerick Generating Station
x/Q and D/Q values

South Stack - Flow = 177200 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
S	Inhalation	NNW	1540	2.17E-08	4.85E-10
S	Vegetation	N	2867	3.49E-08	3.32E-10
S	Vegetation	NNE	2929	3.28E-08	3.21E-10
S	Vegetation	NE	5416	2.80E-08	1.10E-10
S	Vegetation	ENE	4372	3.58E-08	1.76E-10
S	Vegetation	E	3849	7.48E-08	4.73E-10
S	Vegetation	ESE	555	4.71E-07	8.38E-09
S	Vegetation	SE	390	1.37E-06	2.64E-08
S	Vegetation	SSE	2102	4.44E-08	7.43E-10
S	Vegetation	S	1860	2.93E-08	5.39E-10
S	Vegetation	SSW	1622	1.72E-08	3.42E-10
S	Vegetation	SW	1572	1.49E-08	3.80E-10
S	Vegetation	WSW	3662	2.81E-08	2.39E-10
S	Vegetation	W	1283	3.37E-08	7.50E-10
S	Vegetation	WNW	1198	2.30E-08	5.41E-10
S	Vegetation	NW	2490	1.33E-08	1.84E-10
S	Vegetation	NNW	2666	1.88E-08	2.32E-10
S	Meat	N	7565	2.71E-08	8.39E-11
S	Meat	ENE	6264	3.60E-08	1.02E-10
S	Meat	SE	3331	1.54E-07	1.84E-09
S	Meat	S	3722	2.77E-08	2.32E-10
S	Meat	SSW	3145	1.66E-08	1.65E-10
S	Meat	SW	5653	1.72E-08	9.12E-11
S	Meat	WSW	4336	2.71E-08	1.94E-10
S	Meat	W	4467	2.26E-08	1.77E-10
S	Cow	N	7565	2.71E-08	8.39E-11
S	Cow	S	6781	2.43E-08	9.88E-11
S	Cow	SSW	3145	1.66E-08	1.65E-10
S	Cow	WSW	4336	2.71E-08	1.94E-10
S	Cow	W	4467	2.26E-08	1.77E-10