ATTACHMENT 1

2012 ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT NO. 38 FOR LGS

Exelon

Nuclear

Annual Radioactive Effluent Release Report
No. 38

2012

Limerick Generating Station

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

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

NO. 38

January 1, 2012 through December 31, 2012

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
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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, 2012 through December 31, 2012. This submittal complies with the format described in Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water Cooled Nuclear Power Plants", Revision 1, June, 1974.

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

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

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 II.B.2(b) (limits listed here are
	≤ 30	mrem	Skin (Beta)	based on two unit operation)
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 Offsite Dose Calculation Manual (ODCM) Controls 3.2.2.1.a and 3.2.2.1.b as 500 mrem/yr (Total Body), 3000 mrem/yr (Skin), and 1500 mrem/yr (Organ).

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 ODCM 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 estimated based upon a study by EPRI (EPRI 1021106, Estimation of Carbon-14 in Nuclear Power Plant Gaseous Effluents). The principal production reaction leading to the release of C-14 during plant operation is the O-17(n,α) C-14 nuclear reaction in reactor coolant. Carbon-14 is also produced by neutron activation of N-14 in the BWR drywell and dissolved nitrogen in the reactor coolant, however these sources are a small fraction of that produced by the O-17(n,α) C-14 reaction and can be neglected since reactor coolant normally contains less than 0.1 ppm by weight nitrogen and the neutron flux in the drywell is low. Most of the C-14 produced in a BWR is released in a gaseous form by the off-gas system, primarily in the form of $^{14}CO_2$.

An Exelon Fleet-Wide spreadsheet was developed using the production factors from the EPRI report. The spreadsheet requires site specific inputs of total reactor power ratings (7030) MWth and Equivalent Full Power Operation (350) days. Using this method, total C-14 production was estimated at 32.87 Curies (Ci). Ninety-five percent or 32.33 Ci was in the form of $^{14}CO_2$, which was the chemical form necessary to be incorporated in the dose pathways of vegetation, meat and milk. Only inhalation pathway uses the full C-14 production value in estimating dose.

To simplify the dose calculations for C-14, the total production value was used in calculating dose via the offsite effluent pathways. Using the total production C-14 production value, results in a conservative five percent overestimation of dose via the vegetation, meat and milk pathways. In addition, releases of C-14 were assumed to occur only through the North Vent, which is common to both units. The North Vent has the most conservative X/Q factors for calculating dose.

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 quarter was then determined by summing the activity content of all batch releases discharged during the quarter.

5. Tritium in Liquid and Gaseous Effluents

Liquid effluents are analyzed for tritium using a Liquid Scintillation Counter.

Gaseous effluents are analyzed for tritium by passing air from stack effluents through two bubblers in series. An aliquot of the water from each bubbler was analyzed using a Liquid Scintillation Counter.

The monthly liquid radwaste composite was analyzed for tritium 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 as follows:

Airborne:	LLD
Gross Alpha, Sr-89, Sr-90	1E-11 uCi/cc
H-3	1E-06 uCi/cc
I-131	1E-12 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

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. The sum of errors used in this report was documented in IR 138895-02.

E. Batch Releases

Liquid	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
Number of Batch Releases	2.20E+01	2.10E+01	1.10E+01	2.00E+00	5.60E+01
Total time period for batch releases (min)	2.11E+03	1.95E+03	9.23E+02	2.14E+02	5.21E+03
Maximum time period for batch release (min)	1.13E+02	1.15E+02	1.07E+02	1.10E+02	1.15E+02
Average time period for batch release (min)	9.61E+01	9.30E+01	8.39E+01	1.07E+02	9.29E+01
Minimum time period for batch release (min)	7.50E+01	7.00E+01	5.00E+00	1.04E+02	5.00E+00
Average stream flow (Schuylkill River) during periods of release of effluents into a flowing stream (Lpm)	2.23E+04	2.15E+04	2.13E+04	2.04E+04	2.17E+04

Gaseous	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
Number of Batch Releases	0.00E+00	0.00E+00	1.00E+00	1.00E+00	2.00E+00
Total time period for batch releases (min)	0.00E+00	0.00E+00	1.01E+04	1.87E+04	2.88E+04
Maximum time period for batch release (min)	0.00E+00	0.00E+00	1.01E+04	1.87E+04	1.87E+04
Average time period for batch release (min)	0.00E+00	0.00E+00	1.01E+04	1.87E+04	1.44E+04
Minimum time period for batch release (min)	0.00E+00	0.00E+00	1.01E+04	1.87E+04	1.01E+04

F. Abnormal Releases

1. Liquid	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
Number of Releases	1.00E+00	0.00E+00	1.00E+00	0.00E+00	2.00E+00
Total Activity Released (Ci)	2.48E-01	0.00E+00	4.20E-06	0.00E+00	2.48E-01

2. Gaseous	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	3.10E-04	3.10E-04

- On March 19, 2012 water was observed overflowing from the Cooling Tower Blowdown Line emergency relief top hat. Concurrently, a tank of contaminated water was being released via the approved pathway to the Schuylkill River. The overflowed water traveled into Possum Hollow Creek and then to the Schuylkill River. The initial sample taken showed only tritium, at a concentration of 112,000 pCi/L. The area was remediated on 3/20/12 by pumping out the standing water and removing the sludge and silt in the nearby ditch where water had accumulated.

  A bounding dose calculation was performed. The maximum daily organ dose from the 3/19/2012 release to Possum Hollow was 0.175 mrem to a child liver. The maximum daily total body dose to a child was 0.123 mrem. This calculation was based upon the following assumptions:

  1. Reg Guide 1.109 equation D-1 methodology was used.
  2. A dilution factor of 30 was used for cooling tower dilution.
  3. Drinking Water and Fish dose calculated at LGS Discharge (same location as Possum Hollow).
  4. 1 day exposure (2 L drinking water consumption, 0.5 kg fish consumption).

  The resulting calculations were both less than 10 % of the Appendix I Annual dose limits of 20 mrem organ dose and 6 mrem total body dose.

  This issue is documented in the following IRs: 1342540, 1344180, 1347829, 1342884, 1350714.

- On July 15, 2012, tritium was identified in the U1 Turbine Plenum and was pumped to the Hold Pond for release through the normal discharge pathway. The tritium concentration identified was 1.85E-05 uCi/ml. This issue is documented in IR 1392419.

- On November 7, 2012, tritium was identified in the Auxiliary Boiler Dearator at a concentration of 8770 pCi/L. Samples obtained November 21, 2012 and all subsequent samples showed <LLD. The tritium came from the steam heating coils of one of the three storage tanks. There was slight weepage through one the heating coil welds which allowed a buildup of the storage tank fluid in the heating coil during the summer months when the heating coils were out of service. When the heating coils were placed in service in November, the small about of tank fluid was carried back to the deaerator. The effluent pathway from the dearator would be a gaseous release out the dearator vent. The entire issue was documented in IR 1442976.

G. Spills

There was one spill to ground containing radioactive material in 2012. This event was the overflow from the Cooling Tower Blowdown Line emergency relief top hat. The event on 3/19/12 is described in section F. Abnormal Releases.

H. Revisions to the ODCM

Revision 26 of the Offsite Dose Calculation Manual (CY-LG-170-301) was approved by PORC and signed by the Plant Manager in March 2013. A complete legible copy of the new revision, along with detailed information justifying the changes, a determination that the changes did not reduce the accuracy or reliability of dose calculations or setpoint determination, and documentation of review and approval is included in this report.

The majority of the changes were administrative in nature. Appendix D includes a summary of all changes. The following is a summary of the significant changes:

1. Added an Applicability column in Table 3.1-1, Radioactive Liquid Effluent Monitoring Instrumentation, for action to take when less than the minimum number of radiation monitor channels are operable.
2. Revised wording of Action 101 in Table 3.1-1, Radioactive Liquid Effluent Monitoring Instrumentation, to match the standard wording that is in NUREG 1302.
3. Adjusted the midpoint of the facility operating life due to license extension.
4. Updated the X/Q and D/Q values for the garden pathway.

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 2012.

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 2012 the dose to the nearest resident to the ISFSI was zero, using environmental dosimeters from the Radiological Environmental Monitoring Program.

K. Significant Events

Gross alpha is performed monthly on a Liquid Waste Release composite. A positive activity was identified on the July composite sample. Transuranics were performed with all results of less than the lower limit of detection. Gross alpha was not identified in any subsequent samples.

3. Radiological Impact to Man and Compliance to 40 CFR 190 Limits

A. Dose to Members of the Public at or Beyond Site Boundary

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. The ODCM does not require population doses to be calculated. For purposes of this calculation the following assumptions were made:

- Long term annual average meteorology X/Q and D/Q 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.

- Dosimetry 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.
- The highest doses from the critical organ and critical age group for each release pathway was summed and added to the net dosimetry measurement from nearest residence to the ISFSI for 40CFR190 compliance.

Gaseous Releases:

The critical age-organ group was the child-bone. Calculated dose was 6.28E-01 mrem, which represents 2.09 percent of the allowable limits. Carbon-14 represented 99.9 % or 6.28E-01 mrem of the total dose (Table 1).

Liquid Releases:

The critical age-organ was the child-liver. Calculated total body dose and organ dose were 8.09E-02 and 8.09E-02 mrem, respectively.

40 CFR 190 Compliance:

The maximum calculated dose to a real individual would not exceed 2.12E-01 mrem (total body), 7.13E-01 mrem (organ), or 2.12 E-01 mrem (thyroid).

All doses calculated were well below all ODCM and 40 CFR Part 190 limits to a real individual.

Table 1 Summary of Gaseous and Liquid Effluent Doses to Members of the Public at the Highest Dose Receptors and 40CFR190 Compliance

Maximum Individual Noble Gas	**Applicable Dose**	**Estimated Dose**	**Age Group**	**% of Applicable Limit**	**Limit**	**Unit**
Nearest Residence	Gamma Air Dose	4.69E-03	All	2.35E-02	20	mRad
Nearest Residence	Beta Air Dose	3.02E-03	All	7.55E-03	40	mRad
Nearest Residence	Total Body	4.45E-03	All	4.45E-02	10	mrem
Nearest Residence	Skin	7.47E-03	All	2.49E-02	30	mrem
Iodine, Particulate, C-14 & Tritium						
Vegetation Pathway	Bone	6.28E-01	Child	2.09E+00	30	mrem
Liquid						
Phoenixville, PA	Total Body	8.09E-02	Child	1.35E+00	6	mrem
Phoenixville, PA	Liver	8.09E-02	Child	4.05E-01	20	mrem

40 CFR 190 Compliance								
	Gaseous Effluents		**Liquid Effluents**	**Net Direct Radiation**	**Total**	**% of Applicable Limit**	**Limit**	**Unit**
	Noble Gas	**Particulate, Iodine, C-14 & Tritium**						
Total Body Dose	4.45E-03	1.27E-01	8.09E-02	0.00E+00	2.12E-01	8.49E-01	25	mrem
Organ Dose	4.45E-03	6.28E-01	8.09E-02	0.00E+00	7.13E-01	2.85E-00	25	mrem
Thyroid Dose	4.45E-03	1.27E-01	8.08E-02	0.00E+00	2.12E-01	2.83E-01	75	mrem

B. Dose to Members of the Public Inside the Site Boundary

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, 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 sectors encompassing 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 is included.
- 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.

The maximum calculated dose for activities on site was 3.57E-02 mrem at the Rail Road Tracks in the West sector (Table 2). All Doses calculated were a small fraction of the 10 CFR 20.1301 limits.

Table 2 Summary of Gaseous Radiation Doses to Members of the Public for Activities on Site

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	5.14E-03	5.63E-03	2.49E-02	3.57E-02
Info. Center	ESE	884	7.32E-07	9.27E-09	1.42E-03	1.55E-03	6.84E-03	9.81E-03
Frick's Lock	WSW	450	5.58E-07	4.78E-09	1.08E-03	1.18E-03	5.21E-03	7.47E-03
Security Check Point	NNE	682	4.00E-07	4.43E-09	7.72E-04	5.18E-04	1.89E-03	3.18E-03

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

Appendix A
Effluent and Waste Disposal Summary

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

LIST OF TABLES

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TABLE 1A GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES PERIOD 2012

A. Fission And Activation Gasses	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total	Uncertainty (%)
Total Release	Ci	2.31E+01	1.99E+01	3.51E+00	2.51E+01	7.16E+01	36.6
Average Release Rate for Period	uCi/sec	2.93E+00	2.52+00	4.46E-01	3.19E+00	2.27E+00	
Dose - Gamma Air Dose	mrad	8.13E-04	1.23E-03	2.33E-04	2.41E-03	4.69E-03	
- Beta Air Dose	mrad	7.30E-04	7.48E-04	1.40E-04	1.40E-03	3.02E-03	
Percent of ODCM Limit - Gamma Air Dose	%	8.13E-03	1.23E-02	2.33E-03	2.41E-02	2.35E-02	
- Beta Air Dose	%	3.65E-03	3.74E-03	7.02E-04	7.01E-03	7.55E-03	
B. Radioiodines	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	1.04E-04	3.11E-05	< LLD	< LLD	1.35E-04	20.4
Average Release Rate for Period	uCi/sec	1.32E-05	3.94E-06	< LLD	< LLD	4.29E-06	
Percent of ODCM Limit	%	*	*	*	*	*	
C. Particulates	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	< LLD	< LLD	6.60E-11	< LLD	6.60E-11	22.6
Average Release Rate for Period	uCi/sec	< LLD	< LLD	8.37E-12	< LLD	2.09E-12	
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	3.21E+01	1.06E+01	1.30E+01	1.60E+01	7.16E+01	15.7
Average Release Rate for Period	uCi/sec	4.07E+00	1.34E+00	1.64E+00	2.03E+00	2.27E+00	
Percent of ODCM Limit	%	*	*	*	*	*	
F. Carbon-14	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	
Total Release	Ci	6.49E+00	8.52E+00	1.05E+01	7.32E+00	3.28E+01	
Average Release Rate for Period	uCi/sec	8.23E-01	1.08E+00	1.33E+00	9.29E-01	1.04E+00	
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	1.24E-01	1.63E-01	2.00E-01	1.40E-01	6.28E-01	
Percent of ODCM Limit	%	8.28E-01	1.09E+00	1.33E+00	9.35E-01	2.09E+00	

* 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 2012

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	N/A	N/A	< LLD	N/A	< LLD
I-133	Ci	N/A	N/A	< LLD	N/A	< LLD
I-135	Ci	N/A	N/A	< LLD	N/A	< LLD
Total	Ci	N/A	N/A	< LLD	N/A	< LLD
Particulates	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Annual**
Cr-51	Ci	N/A	N/A	< LLD	N/A	< LLD
Mn-54	Ci	N/A	N/A	< LLD	N/A	< LLD
Co-58	Ci	N/A	N/A	< LLD	N/A	< LLD
Co-60	Ci	N/A	N/A	6.60E-11	N/A	6.60E-11
Zn-65	Ci	N/A	N/A	< LLD	N/A	< LLD
Sr-89	Ci	N/A	N/A	< LLD	N/A	< LLD
Sr-90	Ci	N/A	N/A	< LLD	N/A	< LLD
Mo-99	Ci	N/A	N/A	< LLD	N/A	< LLD
Ag-110m	Ci	N/A	N/A	< LLD	N/A	< LLD
Cs-134	Ci	N/A	N/A	< LLD	N/A	< LLD
Cs-137	Ci	N/A	N/A	< LLD	N/A	< LLD
Ba-140	Ci	N/A	N/A	< LLD	N/A	< LLD
La-140	Ci	N/A	N/A	< LLD	N/A	< LLD
Ce-141	Ci	N/A	N/A	< LLD	N/A	< LLD
Ce-144	Ci	N/A	N/A	< LLD	N/A	< LLD
Total	Ci	N/A	N/A	6.60E-11	N/A	6.60E-11
H-3	Ci	N/A	N/A	N/A	1.67E-04	1.67E-04
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 2012

Fission And Activation Gasses	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
Kr-85m	Ci	4.36E-01	3.52E-01	6.28E-02	4.80E-01	1.33E+00
Kr-85	Ci	1.55E-01	2.97E-01	7.41E-02	1.61E+00	2.14E+00
Kr-87	Ci	2.03E-01	4.11E-01	7.76E-02	8.01E-01	1.49E+00
Kr-88	Ci	6.74E-01	5.16E-01	1.04E-01	1.37E+00	2.67E+00
Ar-41	Ci	2.54E-01	1.14E+00	1.80E-01	2.28E-01	1.80E+00
Xe-131m	Ci	3.89E-03	7.43E-03	1.86E-03	4.03E-02	5.35E-02
Xe-133m	Ci	3.98E-01	0.00E+00	0.00E+00	0.00E+00	3.98E-01
Xe-133	Ci	1.24E+01	5.95E+00	9.44E-01	1.33E+00	2.07E+01
Xe-135m	Ci	1.71E+00	4.88E+00	8.36E-01	4.59E+00	1.20E+01
Xe-135	Ci	5.94E+00	4.18E+00	7.61E-01	6.50E+00	1.74E+01
Xe-138	Ci	9.18E-01	2.12E+00	4.71E-01	8.17E+00	1.17E+01
Total	Ci	2.31E+01	1.99E+01	3.51E+00	2.51E+01	7.16E+01
Radioiodines	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
I-131	Ci	1.04E-04	3.11E-05	< LLD	< LLD	1.35E-04
I-133	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
I-135	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Total	Ci	1.04E-04	3.11E-05	< LLD	< LLD	1.35E-04
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	< LLD	< LLD	< LLD	< LLD
Ni-63	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
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	< LLD	< LLD	< LLD	< LLD
H-3	Ci	3.21E+01	1.06E+01	1.30E+01	1.60E+01	7.16E+01
Gross Alpha	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
C-14	Ci	6.49E+00	8.52E+00	1.05E+01	7.32E+00	3.28E+01

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

TABLE 2A LIQUID EFFLUENTS – SUMMATION OF ALL RELEASES PERIOD 2012

Fission and Activation Products Excluding Tritium, Gasses & Alpha)	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total	Uncertainty (%)
Total Release	Ci	7.92E-04	2.76E-04	1.62E-04	9.07E-06	1.24E-03	21.1
Average Concentration	uCi/ml	1.62E-08	6.36E-09	7.98E-09	2.00E-09	1.06E-08	
Dose - Whole Body	mrem	3.04E-02	3.27E-02	1.30E-02	4.75E-03	8.09E-02	
- Organ	mrem	3.04E-02	3.27E-02	1.30E-02	4.75E-03	8.09E-02	
% of ODCM Limit - Whole Body Dose*	%	1.01E+00	1.09E+00	4.33E-01	1.58E-01	1.35E+00	
- Organ Dose*	%	3.04E-01	3.27E-01	1.30E-01	4.75E-02	4.05E-01	
Tritium	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	6.30E+00	6.34E+00	2.76E+00	8.82E-01	1.63E+01	6.4
Average Concentration	uCi/ml	1.29E-04	1.46E-04	1.36E-04	1.95E-04	1.39E-04	
% of ODCM Limit - ECL	%	1.29E+00	1.46E+00	1.36E+00	1.95E+00	1.39E+00	
Dissolved and Entrained Gases	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	3.94E-05	2.72E-05	1.56E-05	4.71E-06	8.68E-05	21.1
Average Concentration	uCi/ml	8.08E-10	6.27E-10	7.64E-10	1.04E-09	7.43E-10	
% of ODCM Limit - ECL	%	4.04E-04	3.14E-04	3.82E-04	5.20E-04	3.71E-04	
Gross Alpha	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total Release	Ci	< LLD	< LLD	9.00E-05	< LLD	9.00E-05	23.0
Average Concentration	uCi/ml	N/A	N/A	1.37E-07	N/A	2.43E-08	
Volume of Waste Released	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total	Liters	1.51E+06	1.39E+06	6.55E+05	1.52E+05	3.70E+06	5.0
Volume of Dilution Water used during period	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**	**Uncertainty (%)**
Total	Liters	4.72E+07	4.20E+07	1.97E+07	4.37E+06	1.13E+08	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 2012

Fission and Activation Products	Units	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
NA-24	Ci	< LLD	6.87E-06	< LLD	< LLD	6.87E-06
Cr-51	Ci	2.21E-04	8.98E-06	1.86E-05	< LLD	2.49E-04
Mn-54	Ci	8.30E-05	2.35E-05	1.37E-05	< LLD	1.20E-04
Fe-55	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Co-58	Ci	2.00E-05	7.41E-06	1.02E-05	< LLD	3.77E-05
Fe-59	Ci	1.23E-05	< LLD	< LLD	< LLD	1.23E-05
Co-60	Ci	3.95E-04	2.03E-04	1.06E-04	9.07E-06	7.14E-04
Zn-65	Ci	4.06E-05	1.61E-05	1.21E-05	< LLD	6.88E-05
Zn-69m	Ci	1.52E-06	1.13E-06	< LLD	< LLD	2.65E-06
Sr-89	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sr-90	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Zr-95	Ci	< LLD	< LLD	1.36E-06	< LLD	1.36E-06
Nb-95	Ci	2.63E-06	< LLD	< LLD	< LLD	2.63E-06
Nb-97	Ci	2.48E-06	< LLD	< LLD	< LLD	2.48E-06
Mo-99	Ci	9.40E-07	< LLD	< LLD	< LLD	9.40E-07
TC-99m	Ci	1.11E-06	< LLD	< LLD	< LLD	1.11E-06
AG-110m	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sb-124	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
Sb-125	Ci	< LLD	< LLD	< LLD	< LLD	< LLD
I-131	Ci	8.58E-07	< LLD	< LLD	< LLD	8.58E-07
Cs-134	Ci	1.62E-06	1.08E-06	< LLD	< LLD	2.70E-06
Cs-137	Ci	7.68E-06	5.99E-06	< LLD	< LLD	1.37E-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
U-235	Ci	< LLD	1.25E-06	< LLD	< LLD	1.25E-06
Total	Ci	7.92E-04	2.76E-04	1.62E-04	9.07E-06	1.24E-03
Dissolved and Entrained Gases	**Units**	**Qtr 1**	**Qtr 2**	**Qtr 3**	**Qtr 4**	**Total**
Ar-41	Ci	1.99E-06	< LLD	< LLD	< LLD	1.99E-06
Xe-131m		< LLD	< LLD	< LLD	< LLD	< LLD
Xe-133	Ci	1.61E-05	1.45E-05	1.11E-05	< LLD	4.18E-05
Xe-135	Ci	2.13E-05	1.27E-05	4.44E-06	4.71E-06	4.31E-05
Total	Ci	3.94E-05	2.72E-05	1.56E-05	4.71E-06	8.68E-05
H-3	Ci	6.30E+00	6.33E+00	2.76E+00	8.82E-01	1.63E+01
Gross Alpha	Ci	< LLD	< LLD	9.00E-05	< LLD	9.00E-05

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

TABLE 2A-2 LIQUID EFFLUENTS - CONTINUOUS MODE PERIOD 2012

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

A. Solid waste shipped offsite for burial or disposal (not irradiated fuel) 01/01/2012 – 12/31/2012

1. Type of waste

Type of waste	Unit	12 Month Period	Estimated Error %
a. Spent resin, filters sludges, evaporator bottoms, etc	m^3	136.20	25%
	Ci	4.80E+02	
b. Dry compressible waste, contaminated equipment, etc.	m^3	113.19	25%
	Ci	6.78E+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	1.92E+00	0.95%
Mn-54	7.78E+00	3.88%
Fe-55	8.34E+01	41.68%
Co-60	8.01E+01	40.04%
Ni-59	3.14E-02	0.01%
Ni-63	4.21E+00	2.10%
Zn-65	1.03E+01	5.14%
Sr-90	8.41E-02	0.03%
Cs-137	6.64E+00	3.30%
Ce-144	2.29E-02	0.01%
Cs-134	4.16E+00	2.07%
H-3	7.62E-02	0.03%
Co-58	1.55E+00	0.76%
TOTALS	2.00E+02	100.00%

* Activity is estimated

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

Isotope	Waste Class A Curies *	Percent Abundance
Co-60	2.17E+00	32.01%
Cs-137	8.52E-03	0.12%
Fe-55	4.13E+00	60.92%
Mn-54	2.38E-01	3.51%
Ni-63	1.10E-01	1.63%
Zn-65	5.39E-02	0.79%
H-3	6.89E-02	1.02%
TOTALS	6.78E+00	100.00%

* Activity is estimated

3. Solid Waste (Disposition)

Number of Shipments	Mode of Transportation	Destination
49	Truck	Energy Solutions (Bear Creek Operations to Clive)
18	Truck	Limerick Gen. Sta. to Energy Solutions / Clive
1	Truck	Limerick Gen. Sta. to Waste Control Spec./Texas

Waste (Processing)

Number of Shipments	Mode of Transportation	Destination
39	Truck	Limerick Gen. Sta. to Energy Solutions Processing Facility
3	Truck	Limerick Gen Sta to TOSCO Processing Facility

Waste (Solidification)

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

Category A - 24 shipments Type A LSA
Category A - 4 shipments > Type A LSA
Category A - 1 shipment Type B
Category B - 32 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

Revision 8 to RW-AA-100, "Process Control Program for Radioactive Wastes" was implemented in 2012. The revision addresses the storage of waste from one Exelon Nuclear plant at another Exelon Nuclear plant provided NRC approval has been received for the transfer of the waste.

Wording was also added to the procedure to address the storage of activated hardware in the pool or processed into the dry cask storage system.

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Appendix C
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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	3	0	0	0	3
S	0	7	4	0	0	0	11
SSW	0	10	14	1	0	0	25
SW	0	12	4	0	0	0	16
WSW	0	7	3	0	0	0	10
W	0	2	4	2	0	0	8
WNW	0	4	3	0	0	0	7
NW	0	1	0	0	0	0	1
NNW	0	0	1	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	0	43	36	3	0	0	82

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	4	0	0	0	4
ESE	0	1	0	0	0	0	1
SE	0	1	0	0	0	0	1
SSE	0	1	1	0	0	0	2
S	0	4	1	0	0	0	5
SSW	0	3	2	1	0	0	6
SW	0	3	1	0	0	0	4
WSW	1	4	4	0	0	0	9
W	0	1	7	0	0	0	8
WNW	0	4	12	1	0	0	17
NW	0	3	8	0	0	0	11
NNW	0	4	0	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	1	29	40	2	0	0	72

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	1	0	0	0	0	1
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	2	6	0	0	0	8
ESE	0	4	2	0	0	0	6
SE	0	3	1	0	0	0	4
SSE	0	1	1	0	0	0	2
S	1	3	1	0	0	0	5
SSW	0	3	1	0	0	0	4
SW	0	6	0	0	0	0	6
WSW	0	3	1	0	0	0	4
W	0	6	7	3	0	0	16
WNW	0	7	14	4	0	0	25
NW	0	9	15	4	0	0	28
NNW	0	1	5	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	1	51	54	11	0	0	117

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	22	14	0	0	0	49
NNE	10	15	4	0	0	0	29
NE	17	24	2	0	0	0	43
ENE	18	38	4	0	0	0	60
E	10	29	42	1	0	0	82
ESE	4	13	7	0	0	0	24
SE	5	10	2	0	0	0	17
SSE	8	11	2	0	0	0	21
S	5	14	4	0	0	0	23
SSW	8	27	6	1	0	0	42
SW	8	16	1	0	0	0	25
WSW	7	13	1	1	0	0	22
W	12	34	47	7	0	0	100
WNW	10	36	40	25	1	0	112
NW	5	42	99	43	1	0	190
NNW	5	14	30	9	7	0	65
Variable	1	0	0	0	0	0	1
Total	146	358	305	87	9	0	905

Hours of calm in this stability class: 2
Hours of missing wind measurements in this stability class: 1
Hours of missing stability measurements in all stability classes: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	14	7	0	0	0	0	21
NNE	20	9	1	0	0	0	30
NE	11	6	1	0	0	0	18
ENE	13	15	1	0	0	0	29
E	14	15	15	1	0	0	45
ESE	15	6	8	0	0	0	29
SE	10	4	0	0	0	0	14
SSE	6	15	4	0	0	0	25
S	18	37	3	0	0	0	58
SSW	13	26	11	0	0	0	50
SW	18	19	4	0	0	0	41
WSW	27	15	0	0	0	0	42
W	28	41	18	1	0	0	88
WNW	28	40	6	4	0	0	78
NW	10	19	13	5	0	0	47
NNW	10	10	6	3	0	0	29
Variable	0	0	0	0	0	0	0
Total	255	284	91	14	0	0	644

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	8	0	0	0	0	0	8
NNE	7	1	0	0	0	0	8
NE	3	0	0	0	0	0	3
ENE	10	0	0	0	0	0	10
E	9	1	0	0	0	0	10
ESE	6	1	0	0	0	0	7
SE	5	1	0	0	0	0	6
SSE	2	0	0	0	0	0	2
S	6	1	0	0	0	0	7
SSW	4	3	0	0	0	0	7
SW	6	1	0	0	0	0	7
WSW	8	4	0	0	0	0	12
W	27	4	0	0	0	0	31
WNW	18	8	0	0	0	0	26
NW	6	2	0	0	0	0	8
NNW	10	0	0	0	0	0	10
Variable	4	0	0	0	0	0	4
Total	139	27	0	0	0	0	166

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	15	3	0	0	0	0	18
NNE	6	0	0	0	0	0	6
NE	13	0	0	0	0	0	13
ENE	7	0	0	0	0	0	7
E	3	0	0	0	0	0	3
ESE	4	0	0	0	0	0	4
SE	3	0	0	0	0	0	3
SSE	3	0	0	0	0	0	3
S	3	1	0	0	0	0	4
SSW	3	0	0	0	0	0	3
SW	7	0	0	0	0	0	7
WSW	6	0	0	0	0	0	6
W	27	0	0	0	0	0	27
WNW	21	1	0	0	0	0	22
NW	23	1	0	0	0	0	24
NNW	19	0	0	0	0	0	19
Variable	0	0	0	0	0	0	0
Total	163	6	0	0	0	0	169

Hours of calm in this stability class: 10
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	3	0	0	3
S	0	1	3	3	0	0	7
SSW	0	2	14	7	1	0	24
SW	0	0	11	8	3	0	22
WSW	0	1	4	5	0	0	10
W	0	0	1	2	1	2	6
WNW	0	0	4	4	0	0	8
NW	0	0	0	0	0	0	0
NNW	0	0	2	0	0	0	2
Variable	0	0	0	0	0	0	0
Total	0	4	39	32	5	2	82

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	1	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	3	0	0	0	3
ESE	0	0	2	0	0	0	2
SE	0	0	0	0	0	0	0
SSE	0	1	0	0	0	0	1
S	0	1	3	1	0	0	5
SSW	0	3	2	1	1	0	7
SW	0	0	3	3	0	0	6
WSW	0	2	2	5	0	0	9
W	0	0	1	7	0	0	8
WNW	0	3	1	11	2	0	17
NW	0	0	9	1	0	0	10
NNW	0	1	2	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	0	12	28	29	3	0	72

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	1	0	0	1
NNE	0	1	1	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	1	5	0	0	0	6
ESE	0	2	4	0	0	0	6
SE	0	1	4	0	0	0	5
SSE	0	1	0	1	0	0	2
S	0	1	3	0	0	0	4
SSW	0	2	3	1	0	0	6
SW	0	2	2	1	0	0	5
WSW	0	1	4	1	0	0	6
W	0	3	3	3	5	2	16
WNW	0	2	6	13	2	3	26
NW	0	2	9	11	2	0	24
NNW	0	0	5	2	0	0	7
Variable	0	0	0	0	0	0	0
Total	0	20	49	34	9	5	117

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	10	25	3	1	0	41
NNE	0	18	14	6	0	0	38
NE	9	22	13	2	0	0	46
ENE	7	31	8	1	0	0	47
E	4	29	41	14	1	0	89
ESE	3	6	18	8	0	0	35
SE	4	5	8	2	0	0	19
SSE	3	5	8	0	0	0	16
S	6	8	7	2	0	0	23
SSW	5	12	22	9	2	0	50
SW	2	9	10	1	2	0	24
WSW	5	5	11	3	1	1	26
W	2	9	13	35	12	7	78
WNW	1	12	40	52	24	8	137
NW	1	13	56	61	27	2	160
NNW	4	6	17	28	12	6	73
Variable	0	0	0	0	0	0	0
Total	58	200	311	227	82	24	902

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 6
Hours of missing stability measurements in all stability classes: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	2	8	13	0	1	0	24
NNE	2	8	9	2	0	0	21
NE	6	10	3	1	0	0	20
ENE	3	35	4	0	0	0	42
E	4	7	15	5	0	0	31
ESE	3	9	11	8	1	0	32
SE	2	6	5	0	0	0	13
SSE	3	8	4	2	0	0	17
S	3	13	27	7	1	0	51
SSW	1	19	34	10	7	0	71
SW	0	22	16	11	6	0	55
WSW	1	13	19	4	0	0	37
W	1	15	24	18	7	0	65
WNW	2	24	39	8	7	1	81
NW	1	14	27	8	3	1	54
NNW	3	6	10	6	2	0	27
Variable	0	0	0	0	0	0	0
Total	37	217	260	90	35	2	641

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 4
Hours of missing stability measurements in all stability classes: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
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	4	2	0	0	0	8
NNE	1	6	2	0	0	0	9
NE	0	3	0	0	0	0	3
ENE	1	5	0	0	0	0	6
E	1	3	2	0	0	0	6
ESE	4	2	0	0	0	0	6
SE	3	1	1	0	0	0	5
SSE	3	4	0	0	0	0	7
S	2	9	2	0	0	0	13
SSW	0	3	3	0	0	0	6
SW	1	5	4	0	0	0	10
WSW	1	7	7	3	0	0	18
W	2	7	6	0	0	0	15
WNW	1	17	14	0	0	0	32
NW	1	12	5	2	0	0	20
NNW	0	4	1	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	23	92	49	5	0	0	169

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: 12

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, 2012

Limerick Tower 1

Period of Record: January - March 2012
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	4	0	2	0	0	0	6
NNE	2	0	0	0	0	0	2
NE	3	0	0	0	0	0	3
ENE	3	2	0	0	0	0	5
E	2	0	0	0	0	0	2
ESE	0	1	0	0	0	0	1
SE	1	1	0	0	0	0	2
SSE	3	0	1	0	0	0	4
S	4	8	0	1	0	0	13
SSW	4	11	2	0	0	0	17
SW	6	6	5	1	0	0	18
WSW	5	9	2	0	0	0	16
W	7	9	1	0	0	0	17
WNW	9	19	11	2	0	0	41
NW	7	8	7	1	0	0	23
NNW	5	2	1	0	0	0	8
Variable	0	0	0	0	0	0	0
Total	65	76	32	5	0	0	178

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: 12

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	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	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	1	0	0	0	0	1
S	0	2	0	0	0	0	2
SSW	0	0	0	0	0	0	0
SW	0	4	1	0	0	0	5
WSW	0	1	2	0	0	0	3
W	0	9	1	0	0	0	10
WNW	0	4	3	0	0	0	7
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	21	7	0	0	0	28

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	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	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	1	0	0	0	0	1
SE	0	2	0	0	0	0	2
SSE	0	2	0	0	0	0	2
S	0	1	1	0	0	0	2
SSW	0	5	3	0	0	0	8
SW	0	2	1	0	0	0	3
WSW	1	2	3	0	0	0	6
W	0	3	2	1	0	0	6
WNW	0	11	0	2	0	0	13
NW	0	1	3	2	0	0	6
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	1	30	13	5	0	0	49

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	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	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	2	0	0	0	0	2
ESE	0	0	0	0	0	0	0
SE	0	4	0	0	0	0	4
SSE	0	1	0	0	0	0	1
S	0	2	0	0	0	0	2
SSW	1	5	2	0	0	0	8
SW	0	0	1	0	0	0	1
WSW	0	8	0	0	0	0	8
W	0	7	1	0	0	0	8
WNW	0	6	4	2	0	0	12
NW	0	7	14	5	0	0	26
NNW	1	1	3	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	2	44	25	7	0	0	78

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
Stability Class - Neutral - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	2	27	12	0	0	0	41
NNE	1	15	2	0	0	0	18
NE	3	17	1	0	0	0	21
ENE	2	25	0	0	0	0	27
E	12	35	13	0	0	0	60
ESE	10	12	13	3	0	0	38
SE	5	13	0	0	0	0	18
SSE	11	6	0	0	0	0	17
S	10	26	8	0	0	0	44
SSW	20	27	2	0	0	0	49
SW	10	11	0	0	0	0	21
WSW	16	22	0	0	0	0	38
W	10	22	5	0	0	0	37
WNW	9	33	17	6	0	0	65
NW	14	49	83	41	0	0	187
NNW	7	19	33	13	1	0	73
Variable	0	0	0	0	0	0	0
Total	142	359	189	63	1	0	754

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	11	11	18	1	0	0	41
NNE	9	8	3	2	0	0	22
NE	12	9	0	0	0	0	21
ENE	19	13	1	0	0	0	33
E	10	44	12	0	0	0	66
ESE	15	26	8	0	0	0	49
SE	14	15	1	0	0	0	30
SSE	19	26	0	0	0	0	45
S	21	32	4	0	0	0	57
SSW	22	36	1	0	0	0	59
SW	16	7	0	0	0	0	23
WSW	31	6	0	0	0	0	37
W	33	22	1	0	0	0	56
WNW	22	33	7	1	0	0	63
NW	13	48	24	5	0	0	90
NNW	16	25	22	2	0	0	65
Variable	0	0	0	0	0	0	0
Total	283	361	102	11	0	0	757

Hours of calm in this stability class: 2
Hours of missing wind measurements in this stability class: 1
Hours of missing stability measurements in all stability classes: 78

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
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	2	0	0	0	0	9
NNE	3	1	0	0	0	0	4
NE	6	1	0	0	0	0	7
ENE	3	0	0	0	0	0	3
E	7	1	0	0	0	0	8
ESE	5	2	0	0	0	0	7
SE	5	0	0	0	0	0	5
SSE	8	1	0	0	0	0	9
S	3	2	0	0	0	0	5
SSW	9	4	0	0	0	0	13
SW	12	2	0	0	0	0	14
WSW	15	0	0	0	0	0	15
W	30	6	0	0	0	0	36
WNW	34	6	0	0	0	0	40
NW	18	11	0	0	0	0	29
NNW	16	0	0	0	0	0	16
Variable	1	1	0	0	0	0	2
Total	182	40	0	0	0	0	222

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: 78

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
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	8	0	0	0	0	0	8
NE	11	0	0	0	0	0	11
ENE	11	0	0	0	0	0	11
E	9	0	0	0	0	0	9
ESE	3	1	0	0	0	0	4
SE	2	0	0	0	0	0	2
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	6	1	0	0	0	0	7
WSW	12	0	0	0	0	0	12
W	27	2	0	0	0	0	29
WNW	38	4	0	0	0	0	42
NW	24	1	0	0	0	0	25
NNW	24	0	0	0	0	0	24
Variable	1	0	0	0	0	0	1
Total	192	9	0	0	0	0	201

Hours of calm in this stability class: 11
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 78

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	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	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	2	0	0	0	2
SSW	0	0	1	0	0	0	1
SW	0	0	4	0	1	0	5
WSW	0	0	1	1	2	0	4
W	0	1	11	2	0	0	14
WNW	0	0	1	1	0	0	2
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	1	20	4	3	0	28

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
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	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	1	2	0	0	0	3
SSE	0	0	1	0	0	0	1
S	0	0	2	0	0	0	2
SSW	0	1	3	4	0	0	8
SW	0	2	1	1	1	0	5
WSW	0	1	2	1	1	0	5
W	0	2	7	5	2	0	16
WNW	0	1	1	2	0	2	6
NW	0	0	1	0	2	0	3
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	8	20	13	6	2	49

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
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	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	0	2	0	0	0	2
ESE	0	0	0	0	0	0	0
SE	0	2	0	0	0	0	2
SSE	0	0	2	0	0	0	2
S	0	1	1	0	0	0	2
SSW	0	3	2	3	0	0	8
SW	0	1	0	1	0	0	2
WSW	0	3	4	1	0	0	8
W	0	4	2	2	0	0	8
WNW	0	2	8	10	1	2	23
NW	0	2	3	6	4	0	15
NNW	0	0	3	1	0	0	4
Variable	0	0	0	0	0	0	0
Total	1	19	27	24	5	2	78

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

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, 2012**

Limerick Tower 1

Period of Record: April - June 2012
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	16	25	10	2	0	55
NNE	1	13	4	1	0	0	19
NE	3	11	5	1	0	0	20
ENE	0	16	8	0	0	0	24
E	3	20	28	6	0	0	57
ESE	5	12	10	7	3	0	37
SE	8	8	8	1	1	0	26
SSE	1	10	2	0	0	0	13
S	4	16	15	6	0	0	41
SSW	4	23	17	5	0	0	49
SW	5	14	10	1	1	0	31
WSW	6	21	11	9	0	0	47
W	5	15	17	6	3	0	46
WNW	7	18	27	24	16	2	94
NW	6	13	32	59	22	0	132
NNW	0	8	21	29	4	1	63
Variable	0	0	0	0	0	0	0
Total	60	234	240	165	52	3	754

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

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, 2012**

Limerick Tower 1

Period of Record: April - June 2012
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	4	6	22	18	0	0	50
NNE	5	5	7	7	3	0	27
NE	5	3	8	0	0	0	16
ENE	6	14	4	0	0	0	24
E	6	25	29	5	1	0	66
ESE	4	15	18	1	0	0	38
SE	4	18	23	7	1	0	53
SSE	5	14	23	0	0	0	42
S	6	25	27	5	0	0	63
SSW	5	17	36	5	0	0	63
SW	5	17	15	4	0	0	41
WSW	2	10	12	3	0	0	27
W	4	16	20	6	0	0	46
WNW	4	22	42	14	6	1	89
NW	6	8	38	9	4	0	65
NNW	3	9	28	7	1	0	48
Variable	0	0	0	0	0	0	0
Total	74	224	352	91	16	1	758

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
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	7	4	0	0	0	11
NNE	2	5	1	0	0	0	8
NE	2	3	1	0	0	0	6
ENE	4	4	0	0	0	0	8
E	1	1	1	0	0	0	3
ESE	2	3	3	0	0	0	8
SE	2	0	2	0	0	0	4
SSE	2	1	0	0	0	0	3
S	2	5	2	0	0	0	9
SSW	5	8	7	0	0	0	20
SW	0	7	10	1	0	0	18
WSW	0	7	10	0	0	0	17
W	1	21	5	0	0	0	27
WNW	4	23	20	0	0	0	47
NW	3	10	12	1	0	0	26
NNW	1	3	4	0	0	0	8
Variable	0	0	0	0	0	0	0
Total	31	108	82	2	0	0	223

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

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, 2012

Limerick Tower 1

Period of Record: April - June 2012
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	4	6	1	0	0	0	11
NNE	3	8	4	0	0	0	15
NE	0	1	0	0	0	0	1
ENE	3	10	0	0	0	0	13
E	3	5	0	0	0	0	8
ESE	1	3	3	0	0	0	7
SE	3	2	1	0	0	0	6
SSE	1	0	0	0	0	0	1
S	1	3	1	0	0	0	5
SSW	1	1	0	0	0	0	2
SW	1	5	1	0	0	0	7
WSW	1	9	3	0	0	0	13
W	2	16	4	1	0	0	23
WNW	1	29	28	5	0	0	63
NW	4	17	6	0	0	0	27
NNW	2	7	0	0	0	0	9
Variable	0	0	0	0	0	0	0
Total	31	122	52	6	0	0	211

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: 78

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	3	0	0	0	0	3
SSW	0	11	1	0	0	0	12
SW	0	10	0	0	0	0	10
WSW	0	3	0	0	0	0	3
W	0	9	0	0	0	0	9
WNW	0	5	0	0	0	0	5
NW	0	6	1	0	0	0	7
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	47	2	0	0	0	49

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	14	0	0	0	0	14
SSE	0	0	0	0	0	0	0
S	0	3	0	0	0	0	3
SSW	0	1	1	0	0	0	2
SW	1	3	0	0	0	0	4
WSW	0	1	0	0	0	0	1
W	0	5	0	0	0	0	5
WNW	0	6	0	0	0	0	6
NW	1	4	7	0	0	0	12
NNW	1	2	2	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	3	39	10	0	0	0	52

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	1	0	0	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	2	1	0	0	0	0	3
SSW	0	6	2	0	0	0	8
SW	1	1	0	0	0	0	2
WSW	1	3	0	0	0	0	4
W	2	2	0	0	0	0	4
WNW	4	0	0	0	0	0	4
NW	1	7	6	0	0	0	14
NNW	0	5	16	1	0	0	22
Variable	0	0	0	0	0	0	0
Total	12	26	24	1	0	0	63

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	5	2	3	0	0	0	10
NNE	0	0	0	0	0	0	0
NE	2	0	0	0	0	0	2
ENE	2	0	0	0	0	0	2
E	6	3	0	0	0	0	9
ESE	2	5	0	0	0	0	7
SE	9	6	1	0	0	0	16
SSE	6	7	0	0	0	0	13
S	8	9	5	1	0	0	23
SSW	2	13	1	0	0	0	16
SW	6	0	0	0	0	0	6
WSW	5	5	1	0	0	0	11
W	3	7	0	0	0	0	10
WNW	7	6	0	0	0	0	13
NW	8	33	12	0	0	0	53
NNW	1	17	22	1	0	0	41
Variable	1	0	0	0	0	0	1
Total	73	113	45	2	0	0	233

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	3	1	0	0	0	0	4
NNE	3	0	0	0	0	0	3
NE	5	0	0	0	0	0	5
ENE	3	1	0	0	0	0	4
E	11	7	0	0	0	0	18
ESE	12	8	0	0	0	0	20
SE	2	6	0	0	0	0	8
SSE	4	7	0	0	0	0	11
S	1	18	3	1	0	0	23
SSW	9	10	1	0	0	0	20
SW	6	2	0	0	0	0	8
WSW	9	2	0	0	0	0	11
W	11	2	0	0	0	0	13
WNW	23	4	0	0	0	0	27
NW	26	11	1	0	0	0	38
NNW	5	3	0	0	0	0	8
Variable	0	0	0	0	0	0	0
Total	133	82	5	1	0	0	221

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	14	1	0	0	0	0	15
NNE	4	1	0	0	0	0	5
NE	3	0	0	0	0	0	3
ENE	0	0	0	0	0	0	0
E	1	0	0	0	0	0	1
ESE	3	0	0	0	0	0	3
SE	0	0	0	0	0	0	0
SSE	1	0	0	0	0	0	1
S	1	0	0	0	0	0	1
SSW	5	2	0	0	0	0	7
SW	9	1	0	0	0	0	10
WSW	16	0	0	0	0	0	16
W	8	0	0	0	0	0	8
WNW	26	1	0	0	0	0	27
NW	23	0	0	0	0	0	23
NNW	10	1	0	0	0	0	11
Variable	0	0	0	0	0	0	0
Total	124	7	0	0	0	0	131

Hours of calm in this stability class: 6
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	13	1	0	0	0	0	14
NNE	5	0	0	0	0	0	5
NE	5	0	0	0	0	0	5
ENE	1	0	0	0	0	0	1
E	3	0	0	0	0	0	3
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	1	0	0	0	0	0	1
SSW	0	0	0	0	0	0	0
SW	3	0	0	0	0	0	3
WSW	6	0	0	0	0	0	6
W	12	0	0	0	0	0	12
WNW	15	0	0	0	0	0	15
NW	19	0	0	0	0	0	19
NNW	12	0	0	0	0	0	12
Variable	1	0	0	0	0	0	1
Total	98	1	0	0	0	0	99

Hours of calm in this stability class: 12
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	1	3	0	0	0	4
SSW	0	5	5	1	0	0	11
SW	0	7	2	1	0	0	10
WSW	0	0	4	0	0	0	4
W	0	0	7	3	0	0	10
WNW	0	2	6	0	0	0	8
NW	0	2	0	0	0	0	2
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	17	27	5	0	0	49

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	1	9	0	0	0	10
SSE	0	2	2	0	0	0	4
S	0	1	1	0	0	0	2
SSW	0	1	1	1	0	0	3
SW	0	3	1	0	0	0	4
WSW	0	1	3	0	0	0	4
W	0	2	2	1	0	0	5
WNW	1	2	2	2	0	0	7
NW	0	1	8	1	0	0	10
NNW	0	1	1	1	0	0	3
Variable	0	0	0	0	0	0	0
Total	1	15	30	6	0	0	52

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	1	0	0	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	3	0	0	0	0	3
SSW	0	3	3	2	0	0	8
SW	0	3	1	0	0	0	4
WSW	0	0	2	0	0	0	2
W	0	2	1	0	0	0	3
WNW	1	7	3	0	0	0	11
NW	0	1	7	4	0	0	12
NNW	0	2	5	10	0	0	17
Variable	0	0	0	0	0	0	0
Total	2	22	22	16	0	0	62

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	0	0	7	1	0	0	8
NNE	4	1	0	0	0	0	5
NE	3	0	0	0	0	0	3
ENE	4	1	0	0	0	0	5
E	2	2	6	0	0	0	10
ESE	5	6	3	0	0	0	14
SE	2	3	1	1	0	0	7
SSE	1	2	8	0	4	0	15
S	3	4	13	2	0	0	22
SSW	1	10	3	1	1	0	16
SW	5	3	0	0	0	0	8
WSW	3	1	4	1	1	0	10
W	3	2	4	2	0	0	11
WNW	2	7	14	2	0	0	25
NW	2	12	19	7	0	0	40
NNW	1	5	16	12	0	0	34
Variable	0	0	0	0	0	0	0
Total	41	59	98	29	6	0	233

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	2	0	0	0	2
NNE	1	3	0	0	0	0	4
NE	1	0	0	0	0	0	1
ENE	3	7	0	0	0	0	10
E	2	8	13	0	0	0	23
ESE	0	2	4	0	0	0	6
SE	0	6	1	0	0	0	7
SSE	2	2	9	0	0	0	13
S	0	2	19	4	1	0	26
SSW	2	6	13	2	1	0	24
SW	0	5	1	2	0	0	8
WSW	1	7	5	0	0	0	13
W	1	5	4	1	0	0	11
WNW	3	21	12	1	0	0	37
NW	3	17	10	1	0	0	31
NNW	1	4	1	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	20	95	94	11	2	0	222

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	3	2	0	0	0	7
NNE	1	3	0	0	0	0	4
NE	0	2	0	0	0	0	2
ENE	2	0	0	0	0	0	2
E	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	0	1	0	0	0	1
S	0	1	1	0	0	0	2
SSW	1	2	4	0	0	0	7
SW	1	7	2	0	0	0	10
WSW	1	7	7	0	0	0	15
W	1	11	2	0	0	0	14
WNW	3	25	10	0	0	0	38
NW	8	14	7	0	0	0	29
NNW	2	1	1	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	22	76	38	0	0	0	136

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: 1340

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, 2012

Limerick Tower 1

Period of Record: July - September 2012
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	2	1	0	0	0	4
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	2	0	0	0	0	0	2
E	2	1	0	0	0	0	3
ESE	0	1	0	0	0	0	1
SE	1	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	1	1	0	0	0	0	2
SSW	4	4	2	0	0	0	10
SW	3	5	1	0	0	0	9
WSW	2	1	1	0	0	0	4
W	2	9	1	0	0	0	12
WNW	2	26	12	0	0	0	40
NW	2	12	1	0	0	0	15
NNW	1	4	1	0	0	0	6
Variable	0	0	0	0	0	0	0
Total	24	66	20	0	0	0	110

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: 1340

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
Stability Class - Extremely Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	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	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	3	0	0	0	0	3
SSW	0	6	3	0	0	0	9
SW	0	2	0	0	0	0	2
WSW	0	1	1	0	0	0	2
W	0	3	0	0	0	0	3
WNW	0	2	1	0	0	0	3
NW	0	2	1	0	0	0	3
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	20	6	0	0	0	26

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	1	0	1	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	1	0	0	0	0	0	1
ESE	0	0	2	0	0	0	2
SE	0	0	1	0	0	0	1
SSE	0	0	0	0	0	0	0
S	0	3	0	0	0	0	3
SSW	0	5	1	0	0	0	6
SW	0	2	0	0	0	0	2
WSW	0	2	0	0	0	0	2
W	0	8	5	0	0	0	13
WNW	1	5	2	0	0	0	8
NW	0	1	3	1	0	0	5
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	3	26	15	1	0	0	45

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	1	3	0	0	0	0	4
NE	2	4	0	0	0	0	6
ENE	0	7	0	0	0	0	7
E	0	3	0	0	0	0	3
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	5	0	0	0	0	5
SSW	0	1	1	0	0	0	2
SW	0	1	0	0	0	0	1
WSW	0	1	0	0	0	0	1
W	1	7	0	0	0	0	8
WNW	0	7	6	0	0	0	13
NW	0	7	18	1	0	0	26
NNW	0	0	2	1	0	0	3
Variable	0	0	0	0	0	0	0
Total	4	47	27	2	0	0	80

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	27	14	13	6	0	1	61
NNE	29	35	9	1	1	0	75
NE	23	38	10	0	1	1	73
ENE	31	55	3	4	0	0	93
E	24	43	7	4	1	1	80
ESE	16	21	7	5	2	1	52
SE	9	4	11	2	0	0	26
SSE	4	14	5	0	0	0	23
S	5	17	5	0	0	0	27
SSW	4	19	0	0	0	0	23
SW	9	3	1	0	0	0	13
WSW	9	9	2	0	0	0	20
W	14	32	13	0	0	0	59
WNW	16	44	54	10	0	0	124
NW	10	40	122	57	1	0	230
NNW	23	18	42	11	3	0	97
Variable	3	0	0	0	0	0	3
Total	256	406	304	100	9	4	1079

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
Stability Class - Slightly Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	24	17	1	0	0	0	42
NNE	12	17	0	0	0	0	29
NE	17	5	0	0	0	0	22
ENE	22	5	0	0	0	0	27
E	10	7	0	0	0	0	17
ESE	6	2	2	0	0	0	10
SE	0	0	0	0	0	0	0
SSE	2	11	1	0	0	0	14
S	6	20	1	0	0	0	27
SSW	7	13	0	0	0	0	20
SW	6	2	0	0	0	0	8
WSW	20	7	1	0	0	0	28
W	38	14	1	0	0	0	53
WNW	41	28	4	0	0	0	73
NW	16	25	2	0	0	0	43
NNW	18	6	0	0	0	0	24
Variable	0	0	0	0	0	0	0
Total	245	179	13	0	0	0	437

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	11	0	0	0	0	0	11
NNE	5	3	0	0	0	0	8
NE	6	3	0	0	0	0	9
ENE	17	1	0	0	0	0	18
E	14	1	0	0	0	0	15
ESE	8	4	0	0	0	0	12
SE	8	1	0	0	0	0	9
SSE	1	0	0	0	0	0	1
S	4	0	0	0	0	0	4
SSW	2	2	0	0	0	0	4
SW	8	0	1	0	0	0	9
WSW	7	0	0	0	0	0	7
W	30	3	0	0	0	0	33
WNW	35	6	0	0	0	0	41
NW	28	3	0	0	0	0	31
NNW	10	1	0	0	0	0	11
Variable	0	0	0	0	0	0	0
Total	194	28	1	0	0	0	223

Hours of calm in this stability class: 11
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
Stability Class - Extremely Stable - 171Ft-26Ft Delta-T (F)
Winds Measured at 30 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	20	0	0	0	0	0	20
NNE	8	0	0	0	0	0	8
NE	5	0	0	0	0	0	5
ENE	8	0	0	0	0	0	8
E	3	0	0	0	0	0	3
ESE	5	0	0	0	0	0	5
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	5	0	0	0	0	0	5
SW	0	1	0	0	0	0	1
WSW	12	0	0	0	0	0	12
W	47	1	0	0	0	0	48
WNW	60	1	0	0	0	0	61
NW	54	1	0	0	0	0	55
NNW	26	1	0	0	0	0	27
Variable	0	0	0	0	0	0	0
Total	256	5	0	0	0	0	261

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	0	0	0	0	0
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	1	3	0	0	0	4
SSW	0	2	5	2	0	0	9
SW	0	1	0	0	0	0	1
WSW	0	0	2	2	0	0	4
W	0	0	3	1	0	0	4
WNW	0	0	1	1	0	0	2
NW	0	1	0	0	0	0	1
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	0	6	14	6	0	0	26

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
Stability Class - Moderately Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	0	0	0	0	0	0
NNE	0	0	1	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	1	0	0	0	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	0	0	2	0	0	2
SSE	0	0	0	1	0	0	1
S	0	1	1	1	0	0	3
SSW	0	2	4	1	0	0	7
SW	0	0	1	0	0	0	1
WSW	0	0	3	1	0	0	4
W	0	2	3	8	0	0	13
WNW	0	2	3	2	0	0	7
NW	0	0	0	3	1	0	4
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	1	7	16	19	1	0	44

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
Stability Class - Slightly Unstable - 171Ft-26Ft Delta-T (F)
Winds Measured at 175 Feet

Wind Speed (in mph)

Wind Direction	1-3	4-7	8-12	13-18	19-24	> 24	Total
N	0	2	0	0	0	0	2
NNE	0	1	1	0	0	0	2
NE	3	3	1	0	0	0	7
ENE	0	5	2	0	0	0	7
E	0	1	1	0	0	0	2
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	2	0	0	0	2
S	0	1	3	0	0	0	4
SSW	0	0	0	1	0	0	1
SW	0	0	2	0	0	0	2
WSW	0	0	2	2	0	0	4
W	0	1	3	3	0	0	7
WNW	0	0	12	10	0	0	22
NW	0	0	7	8	1	0	16
NNW	0	0	0	1	1	0	2
Variable	0	0	0	0	0	0	0
Total	3	14	36	25	2	0	80

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 0
Hours of missing stability measurements in all stability classes: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	15	15	15	7	9	4	65
NNE	17	23	22	8	1	1	72
NE	20	45	21	7	0	2	95
ENE	26	56	14	4	5	1	106
E	8	25	26	3	1	1	64
ESE	8	20	11	4	5	1	49
SE	5	12	3	11	3	3	37
SSE	4	4	9	6	1	0	24
S	4	9	15	4	0	0	32
SSW	1	7	15	1	0	0	24
SW	3	4	6	0	1	0	14
WSW	5	3	18	6	1	0	33
W	7	5	23	18	7	0	60
WNW	10	17	31	70	43	9	180
NW	4	14	44	59	30	6	157
NNW	3	7	28	28	2	0	68
Variable	0	0	0	0	0	0	0
Total	140	266	301	236	109	28	1080

Hours of calm in this stability class: 0
Hours of missing wind measurements in this stability class: 2
Hours of missing stability measurements in all stability classes: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	3	9	17	2	0	0	31
NNE	9	12	10	1	0	0	32
NE	12	11	10	0	0	0	33
ENE	5	14	2	0	0	0	21
E	5	17	8	2	0	0	32
ESE	4	1	4	0	0	0	9
SE	1	3	0	1	0	0	5
SSE	3	2	9	1	0	0	15
S	0	3	14	8	0	0	25
SSW	0	5	16	0	0	0	21
SW	3	6	8	0	0	0	17
WSW	3	6	18	3	1	0	31
W	1	20	15	2	0	0	38
WNW	4	14	34	11	0	0	63
NW	6	16	24	1	0	0	47
NNW	6	6	7	0	0	0	19
Variable	0	0	0	0	0	0	0
Total	65	145	196	32	1	0	439

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	5	6	0	0	0	0	11
NNE	4	4	5	0	0	0	13
NE	2	5	7	0	0	0	14
ENE	5	2	1	0	0	0	8
E	6	8	2	0	0	0	16
ESE	4	10	0	0	0	0	14
SE	0	2	0	0	0	0	2
SSE	3	5	2	0	0	0	10
S	1	6	3	0	0	0	10
SSW	0	8	2	1	0	0	11
SW	0	2	3	0	0	0	5
WSW	3	14	1	0	0	0	18
W	4	10	7	0	0	0	21
WNW	3	16	20	2	0	0	41
NW	3	13	8	0	0	0	24
NNW	7	8	1	0	0	0	16
Variable	0	0	0	0	0	0	0
Total	50	119	62	3	0	0	234

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: 22

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, 2012

Limerick Tower 1

Period of Record: October - December 2012
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	8	14	0	0	0	0	22
NNE	3	7	0	0	0	0	10
NE	3	5	0	0	0	0	8
ENE	2	2	0	0	0	0	4
E	2	3	0	0	0	0	5
ESE	2	4	0	0	0	0	6
SE	4	2	0	0	0	0	6
SSE	0	3	0	0	0	0	3
S	1	1	1	0	0	0	3
SSW	2	3	1	0	0	0	6
SW	4	2	2	1	0	0	9
WSW	8	6	3	0	0	0	17
W	14	14	2	0	0	0	30
WNW	6	40	16	0	0	0	62
NW	10	34	7	0	0	0	51
NNW	7	25	3	0	0	0	35
Variable	1	0	0	0	0	0	1
Total	77	165	35	1	0	0	278

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: 22

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, 2012

Limerick Tower 1
30 ft. Wind Speed and Direction

January-December, 2012
171Ft-26Ft Delta-T (F)

Number of Observations = 7262
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	0.00	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	0.07				0.07				
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	0.01	0.00	0.00	0.00	0.00	0.10						0.10		
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	0.03	0.00	0.06							0.06	0.22
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	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.01	0.01	0.01	0.11		0.11						
1 SU	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.01	0.01	0.04	0.06	0.01	0.01	0.26			0.26					
- N	0.65	0.55	0.62	0.73	0.72	0.44	0.39	0.40	0.39	0.47	0.45	0.51	0.54	0.58	0.51	0.50	8.43				8.43				
3 SS	0.72	0.61	0.62	0.78	0.62	0.66	0.36	0.43	0.63	0.70	0.63	1.20	1.51	1.57	0.90	0.67	12.61					12.61			
MS	0.55	0.26	0.25	0.41	0.43	0.30	0.25	0.17	0.19	0.28	0.48	0.63	1.31	1.56	1.03	0.63	8.73						8.73		
ES	0.83	0.37	0.47	0.37	0.25	0.18	0.10	0.04	0.11	0.14	0.22	0.50	1.56	1.85	1.65	1.12	9.74							9.74	39.88
EU	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.21	0.37	0.39	0.17	0.32	0.21	0.12	0.00	1.80	1.80							
MU	0.00	0.00	0.00	0.00	0.00	0.03	0.23	0.04	0.15	0.19	0.14	0.12	0.23	0.36	0.12	0.08	1.71		1.71						
4 SU	0.01	0.06	0.06	0.12	0.11	0.06	0.10	0.04	0.15	0.21	0.11	0.21	0.30	0.28	0.41	0.10	2.31			2.31					
- N	0.90	0.90	1.09	1.62	1.51	0.70	0.45	0.52	0.91	1.18	0.41	0.67	1.31	1.64	2.26	0.94	17.02				17.02				
7 SS	0.50	0.47	0.28	0.47	1.01	0.58	0.34	0.81	1.47	1.17	0.41	0.41	1.09	1.45	1.42	0.61	12.48					12.48			
MS	0.04	0.08	0.06	0.01	0.04	0.10	0.03	0.01	0.04	0.15	0.06	0.06	0.18	0.29	0.22	0.03	1.39						1.39		
ES	0.06	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.03	0.00	0.04	0.08	0.04	0.01	0.29							0.29	37.00
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.06	0.25	0.07	0.08	0.07	0.10	0.03	0.01	0.70	0.70							
MU	0.00	0.01	0.00	0.00	0.06	0.03	0.01	0.01	0.03	0.10	0.03	0.10	0.19	0.19	0.29	0.03	1.07		1.07						
8 SU	0.00	0.00	0.00	0.00	0.08	0.03	0.01	0.01	0.01	0.08	0.01	0.01	0.11	0.33	0.73	0.36	1.79			1.79					
- N	0.58	0.21	0.18	0.10	0.85	0.37	0.19	0.10	0.30	0.12	0.03	0.06	0.90	1.53	4.35	1.75	11.61				11.61				
1 SS	0.26	0.06	0.01	0.03	0.37	0.25	0.01	0.07	0.15	0.18	0.06	0.01	0.28	0.23	0.55	0.39	2.91					2.91			
2 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01						0.01		
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	18.09
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.04	0.04							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.04	0.04	0.00	0.11		0.11						
3 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	0.04	0.08	0.14	0.03	0.29			0.29					
- N	0.08	0.01	0.00	0.06	0.07	0.11	0.03	0.00	0.01	0.01	0.00	0.01	0.10	0.56	1.94	0.47	3.47				3.47				
1 SS	0.01	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.07	0.14	0.07	0.36					0.36			
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	0.00	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	4.27

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, 2012

30 ft. Wind Speed and Direction — 171Ft-26Ft Delta-T (F)

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							
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	0.00	0.00	0.00		0.00						
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	0.00	0.00	0.00			0.00					
- N	0.00	0.01	0.01	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.15	0.26				0.26				
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	0.26
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	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06				0.06				
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	0.06
TOT	5.21	3.66	3.68	4.71	6.17	3.88	2.51	2.71	4.89	5.65	3.57	4.81	10.16	13.07	16.98	7.96	99.78	2.55	3.00	4.65	40.91	28.35	10.23	10.08	99.78

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.26	0.63	0.45	0.25	0.41	0.30	0.15	0.01	2.55	Extremely Unstable
0.00	0.03	0.00	0.00	0.07	0.06	0.25	0.06	0.18	0.30	0.18	0.25	0.44	0.61	0.47	0.12	3.00	Moderately Unstable
0.03	0.07	0.08	0.12	0.19	0.08	0.11	0.06	0.21	0.30	0.14	0.23	0.50	0.74	1.29	0.50	4.65	Slightly Unstable
2.22	1.68	1.91	2.51	3.18	1.67	1.06	1.02	1.61	1.79	0.90	1.25	2.84	4.32	9.09	3.80	40.91	Neutral
1.49	1.16	0.91	1.28	2.01	1.49	0.72	1.31	2.27	2.05	1.10	1.62	2.89	3.32	3.00	1.74	28.35	Slightly Stable
0.59	0.34	0.30	0.43	0.47	0.40	0.28	0.18	0.23	0.43	0.55	0.70	1.49	1.85	1.25	0.66	10.23	Moderately Stable
0.88	0.37	0.47	0.37	0.25	0.19	0.10	0.04	0.12	0.14	0.25	0.50	1.60	1.93	1.72	1.13	10.08	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	0.22	C A L M
2.75	1.82	1.98	2.30	2.02	1.58	1.09	1.03	1.36	1.60	1.82	2.88	4.96	5.62	4.12	2.95	39.88	< 3.5 mph
1.50	1.51	1.47	2.23	2.67	1.47	1.16	1.45	2.95	3.28	1.54	1.64	3.47	4.30	4.60	1.76	37.00	3.6 - 7.5 mph
0.84	0.28	0.19	0.12	1.36	0.67	0.23	0.23	0.55	0.73	0.21	0.26	1.54	2.38	5.95	2.53	18.09	7.6 - 12.5 mph
0.10	0.04	0.00	0.06	0.08	0.11	0.03	0.00	0.03	0.04	0.00	0.01	0.19	0.76	2.26	0.56	4.27	12.6 - 18.5 mph
0.00	0.01	0.01	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.15	0.26	18.6 - 24.5 mph
0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	> 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, 2012

Limerick Tower 1
175 ft. Wind Speed and Direction

January-December, 2012
171Ft-26Ft Delta-T (F)

Number of Observations = 7308
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	0.00	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	0.00						0.01		
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
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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03		0.03						
1 SU	0.01	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.08			0.08					
- N	0.26	0.30	0.48	0.51	0.23	0.29	0.26	0.12	0.23	0.15	0.21	0.26	0.23	0.27	0.18	0.11	4.09				4.09				
3 SS	0.12	0.23	0.33	0.23	0.23	0.15	0.10	0.18	0.12	0.11	0.11	0.10	0.10	0.18	0.22	0.18	2.68					2.68			
MS	0.12	0.11	0.05	0.16	0.11	0.14	0.07	0.11	0.07	0.08	0.03	0.07	0.11	0.15	0.21	0.14	1.72						1.72		
ES	0.23	0.12	0.08	0.14	0.12	0.04	0.12	0.05	0.10	0.15	0.19	0.22	0.34	0.25	0.31	0.21	2.68							2.68	
																									11.29
EU	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.12	0.11	0.01	0.01	0.03	0.04	0.00	0.38	0.38							
MU	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.04	0.10	0.07	0.05	0.08	0.11	0.01	0.03	0.57		0.57						
4 SU	0.03	0.03	0.04	0.10	0.04	0.03	0.04	0.01	0.08	0.11	0.08	0.05	0.14	0.15	0.07	0.03	1.03			1.03					
- N	0.56	0.75	1.07	1.42	1.04	0.60	0.38	0.29	0.51	0.71	0.41	0.41	0.42	0.74	0.71	0.36	10.39				10.39				
7 SS	0.31	0.38	0.33	0.96	0.78	0.37	0.45	0.36	0.59	0.64	0.68	0.49	0.77	1.11	0.75	0.34	9.32					9.32			
MS	0.27	0.25	0.18	0.15	0.16	0.21	0.04	0.14	0.29	0.29	0.29	0.48	0.67	1.11	0.67	0.22	5.41						5.41		
ES	0.30	0.21	0.08	0.19	0.12	0.12	0.07	0.04	0.18	0.26	0.25	0.34	0.66	1.56	0.97	0.52	5.87							5.87	
																									32.96
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.34	0.23	0.15	0.30	0.16	0.00	0.03	1.37	1.37							
MU	0.00	0.01	0.00	0.00	0.04	0.03	0.15	0.04	0.10	0.14	0.08	0.14	0.18	0.10	0.25	0.04	1.29		1.29						
8 SU	0.00	0.03	0.01	0.03	0.11	0.05	0.05	0.05	0.10	0.11	0.07	0.16	0.12	0.40	0.36	0.18	1.83			1.83					
- N	0.99	0.55	0.53	0.41	1.38	0.57	0.27	0.37	0.68	0.78	0.36	0.60	0.78	1.53	2.07	1.12	13.00				13.00				
1 SS	0.74	0.36	0.29	0.14	0.89	0.51	0.40	0.62	1.19	1.35	0.55	0.74	0.86	1.74	1.35	0.63	12.34					12.34			
2 MS	0.11	0.11	0.11	0.01	0.07	0.05	0.04	0.04	0.11	0.22	0.26	0.34	0.27	0.88	0.44	0.10	3.16						3.16		
ES	0.05	0.05	0.00	0.00	0.00	0.04	0.01	0.01	0.03	0.07	0.12	0.12	0.11	0.92	0.29	0.07	1.90							1.90	
																									34.89
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.14	0.12	0.11	0.11	0.08	0.00	0.00	0.64	0.64							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.03	0.10	0.05	0.10	0.29	0.23	0.07	0.01	0.92		0.92						
3 SU	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10	0.03	0.05	0.11	0.45	0.40	0.19	1.35			1.35					
- N	0.29	0.21	0.14	0.07	0.31	0.26	0.21	0.08	0.19	0.22	0.03	0.26	0.83	2.03	2.55	1.33	8.99				8.99				
1 SS	0.27	0.14	0.01	0.00	0.16	0.12	0.11	0.04	0.33	0.23	0.23	0.14	0.37	0.47	0.26	0.18	3.07					3.07			
8 MS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.04	0.00	0.03	0.04	0.00	0.14						0.14		
ES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.01	0.10	0.01	0.00	0.16							0.16	
																									15.27

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, 2012

Limerick Tower 1
175 ft. Wind Speed and Direction

January-December, 2012
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	0.01	0.05	0.03	0.01	0.00	0.00	0.00	0.11	0.11							
1 MU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.03	0.04	0.00	0.14		0.14						
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	0.07	0.04	0.10	0.01	0.22			0.22					
- N	0.16	0.01	0.00	0.07	0.03	0.11	0.05	0.07	0.00	0.04	0.05	0.04	0.30	1.14	1.08	0.25	3.41				3.41				
2 SS	0.01	0.04	0.00	0.00	0.01	0.01	0.01	0.00	0.03	0.11	0.08	0.01	0.10	0.18	0.10	0.04	0.74					0.74			
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								4.61
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	0.03	0.00	0.00	0.00	0.03	0.03							
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	0.03	0.00	0.00	0.03		0.03						
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	0.03	0.07	0.00	0.00	0.10			0.10					
N	0.05	0.01	0.03	0.01	0.01	0.01	0.04	0.00	0.00	0.00	0.00	0.01	0.10	0.26	0.11	0.10	0.75				0.75				
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	0.03	0.01	0.00	0.04					0.04			
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								0.94
TOT	4.94	3.93	3.80	4.60	5.88	3.72	2.94	2.74	5.23	6.70	4.80	5.56	8.54	16.54	13.66	6.39	99.99	2.53	2.97	4.61	40.63	28.19	10.43	10.63	99.99

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.23	0.62	0.52	0.30	0.47	0.27	0.04	0.03	2.53	Extremely Unstable
0.01	0.01	0.00	0.00	0.05	0.03	0.21	0.10	0.16	0.34	0.22	0.30	0.57	0.51	0.37	0.08	2.97	Moderately Unstable
0.05	0.07	0.10	0.12	0.15	0.08	0.10	0.08	0.18	0.31	0.18	0.27	0.47	1.12	0.92	0.41	4.61	Slightly Unstable
2.31	1.83	2.24	2.49	3.01	1.85	1.22	0.93	1.61	1.90	1.05	1.59	2.67	5.97	6.69	3.26	40.63	Neutral
1.46	1.15	0.96	1.33	2.08	1.16	1.07	1.19	2.26	2.45	1.66	1.48	2.19	3.69	2.70	1.37	28.19	Slightly Stable
0.51	0.47	0.34	0.33	0.34	0.40	0.15	0.29	0.47	0.60	0.59	0.93	1.05	2.16	1.35	0.45	10.43	Moderately Stable
0.59	0.38	0.16	0.33	0.25	0.21	0.21	0.11	0.31	0.48	0.59	0.68	1.12	2.82	1.59	0.79	10.63	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	0.01	C A L M
0.75	0.78	0.99	1.04	0.71	0.62	0.55	0.47	0.52	0.49	0.53	0.64	0.78	0.88	0.92	0.63	11.29	< 3.5 mph
1.49	1.63	1.70	2.82	2.15	1.33	1.01	0.88	1.72	2.23	1.89	1.85	2.75	4.80	3.23	1.49	32.96	3.6 - 7.5 mph
1.89	1.11	0.94	0.59	2.49	1.26	0.93	1.14	2.35	3.01	1.67	2.26	2.63	5.72	4.75	2.16	34.89	7.6 - 12.5 mph
0.57	0.34	0.15	0.07	0.48	0.38	0.34	0.19	0.60	0.79	0.51	0.70	1.72	3.38	3.33	1.71	15.27	12.6 - 18.5 mph
0.18	0.05	0.00	0.07	0.04	0.12	0.07	0.07	0.03	0.18	0.21	0.10	0.51	1.38	1.31	0.30	4.61	18.6 - 24.5 mph
0.05	0.01	0.03	0.01	0.01	0.01	0.04	0.00	0.00	0.00	0.00	0.01	0.15	0.38	0.12	0.10	0.94	> 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, 2012

Limerick Generating Station
x/Q and D/Q values

North Stack - Flow = 316000 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
N	Site Boundary	S	762	1.11E-07	1.20E-09
N	Site Boundary	SSW	762	7.74E-08	7.68E-10
N	Site Boundary	SW	884	4.87E-08	4.49E-10
N	Site Boundary	WSW	854	7.15E-08	6.59E-10
N	Site Boundary	W	854	1.38E-07	1.44E-09
N	Site Boundary	WNW	793	1.02E-07	1.27E-09
N	Site Boundary	NW	762	8.68E-08	1.15E-09
N	Site Boundary	NNW	884	9.69E-08	1.16E-09
N	Site Boundary	N	884	1.38E-07	1.53E-09
N	Site Boundary	NNE	793	1.75E-07	2.43E-09
N	Site Boundary	NE	793	9.58E-08	1.59E-09
N	Site Boundary	ENE	793	8.08E-08	1.12E-09
N	Site Boundary	E	762	2.17E-07	2.94E-09
N	Site Boundary	ESE	762	3.76E-07	4.95E-09
N	Site Boundary	SE	762	6.64E-07	9.57E-09
N	Site Boundary	SSE	1006	1.79E-07	2.44E-09
N	RR-Inf-Lck-NG	S	300	4.77E-07	4.26E-09
N	RR-Inf-Lck-NG	SSW	225	5.63E-07	3.93E-09
N	RR-Inf-Lck-NG	SW	225	4.26E-07	2.76E-09
N	RR-Inf-Lck-NG	WSW	345	2.68E-07	2.07E-09
N	RR-Inf-Lck-NG	W	225	1.14E-06	8.83E-09
N	RR-Inf-Lck-NG	WNW	345	3.56E-07	3.68E-09
N	RR-Inf-Lck-NG	NW	450	1.69E-07	2.04E-09
N	RR-Inf-Lck-NG	ESE	884	3.13E-07	4.08E-09
N	RR-Inf-Lck-NG	WSW	450	1.68E-07	1.44E-09
N	RR-Inf-Lck-NG	NNE	682	2.11E-07	2.90E-09
N	Inhalation	N	948	1.27E-07	1.41E-09
N	Inhalation	NNE	825	1.66E-07	2.32E-09
N	Inhalation	NE	1057	6.63E-08	1.16E-09
N	Inhalation	ENE	985	6.32E-08	9.00E-10
N	Inhalation	E	873	1.84E-07	2.50E-09
N	Inhalation	ESE	1047	2.55E-07	3.31E-09
N	Inhalation	SE	1557	2.93E-07	3.78E-09
N	Inhalation	SSE	1647	1.11E-07	1.36E-09
N	Inhalation	S	1325	5.82E-08	6.73E-10
N	Inhalation	SSW	1543	3.76E-08	4.13E-10
N	Inhalation	SW	991	4.20E-08	4.10E-10
N	Inhalation	WSW	1158	4.99E-08	5.37E-10
N	Inhalation	W	1105	1.02E-07	1.10E-09
N	Inhalation	WNW	1198	6.32E-08	7.99E-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, 2012

Limerick Generating Station
x/Q and D/Q values

North Stack - Flow = 316000 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
N	Inhalation	NW	1104	5.82E-08	7.72E-10
N	Inhalation	NNW	1540	5.29E-08	6.42E-10
N	Vegetation	N	1017	1.17E-07	1.31E-09
N	Vegetation	NNE	2929	6.48E-08	4.53E-10
N	Vegetation	NE	1065	6.56E-08	1.15E-09
N	Vegetation	ENE	4561	4.85E-08	1.52E-10
N	Vegetation	E	3849	9.26E-08	4.12E-10
N	Vegetation	ESE	555	5.75E-07	7.51E-09
N	Vegetation	SE	390	1.74E-06	2.47E-08
N	Vegetation	SSE	2102	9.61E-08	9.94E-10
N	Vegetation	S	1860	4.90E-08	4.90E-10
N	Vegetation	SSW	1622	3.68E-08	3.93E-10
N	Vegetation	SW	1390	3.05E-08	3.61E-10
N	Vegetation	WSW	3662	4.70E-08	2.27E-10
N	Vegetation	W	1283	8.87E-08	9.82E-10
N	Vegetation	WNW	1198	6.32E-08	7.99E-10
N	Vegetation	NW	2490	3.60E-08	2.99E-10
N	Vegetation	NNW	2166	4.54E-08	4.12E-10
N	Meat	N	7551	3.83E-08	9.37E-11
N	Meat	ENE	6264	4.44E-08	9.56E-11
N	Meat	SE	3331	1.68E-07	1.33E-09
N	Meat	S	6741	3.85E-08	9.53E-11
N	Meat	SSW	3167	3.68E-08	1.96E-10
N	Meat	SW	5653	3.17E-08	9.26E-11
N	Meat	WSW	4321	4.60E-08	1.87E-10
N	Meat	W	4467	5.80E-08	2.68E-10
N	Cow	N	7551	3.83E-08	9.37E-11
N	Cow	S	6741	3.85E-08	9.53E-11
N	Cow	SSW	3167	3.68E-08	1.96E-10
N	Cow	WSW	4321	4.60E-08	1.87E-10
N	Cow	W	4467	5.80E-08	2.68E-10
N	Garden	ESE	2198	1.44E-07	1.30E-09
N	Garden	SE	1972	2.42E-07	2.74E-09

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

Table D – 12 Annual x/Q and D/Q values for the South Stack, Limerick Generating Station, 2012

Limerick Generating Station
x/Q and D/Q values

South Stack - Flow = 187000 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
S	Site Boundary	S	762	6.18E-08	8.14E-10
S	Site Boundary	SSW	762	3.79E-08	4.90E-10
S	Site Boundary	SW	884	2.34E-08	3.03E-10
S	Site Boundary	WSW	854	2.80E-08	3.93E-10
S	Site Boundary	W	854	7.94E-08	1.02E-09
S	Site Boundary	WNW	793	5.42E-08	9.18E-10
S	Site Boundary	NW	762	5.40E-08	9.20E-10
S	Site Boundary	NNW	884	5.73E-08	9.20E-10
S	Site Boundary	N	884	7.97E-08	1.17E-09
S	Site Boundary	NNE	793	1.02E-07	1.95E-09
S	Site Boundary	NE	793	6.00E-08	1.36E-09
S	Site Boundary	ENE	793	4.27E-08	8.92E-10
S	Site Boundary	E	762	1.24E-07	2.21E-09
S	Site Boundary	ESE	762	2.06E-07	3.47E-09
S	Site Boundary	SE	762	3.65E-07	6.20E-09
S	Site Boundary	SSE	1006	1.11E-07	1.77E-09
S	RR-Inf-Lck-NG	S	300	2.50E-07	2.50E-09
S	RR-Inf-Lck-NG	SSW	225	2.55E-07	2.08E-09
S	RR-Inf-Lck-NG	SW	225	1.89E-07	1.56E-09
S	RR-Inf-Lck-NG	WSW	345	9.36E-08	9.15E-10
S	RR-Inf-Lck-NG	W	225	6.14E-07	5.32E-09
S	RR-Inf-Lck-NG	WNW	345	1.69E-07	2.24E-09
S	RR-Inf-Lck-NG	NW	450	8.94E-08	1.47E-09
S	RR-Inf-Lck-NG	ESE	884	1.78E-07	2.97E-09
S	RR-Inf-Lck-NG	WSW	450	5.88E-08	6.72E-10
S	RR-Inf-Lck-NG	NNE	682	1.19E-07	2.26E-09
S	Inhalation	N	948	7.46E-08	1.09E-09
S	Inhalation	NNE	825	9.78E-08	1.87E-09
S	Inhalation	NE	1057	4.44E-08	1.03E-09
S	Inhalation	ENE	985	3.63E-08	7.43E-10
S	Inhalation	E	873	1.09E-07	1.93E-09
S	Inhalation	ESE	1047	1.54E-07	2.51E-09
S	Inhalation	SE	1557	2.15E-07	3.07E-09
S	Inhalation	SSE	1647	8.70E-08	1.14E-09
S	Inhalation	S	1325	3.95E-08	5.36E-10
S	Inhalation	SSW	1543	2.65E-08	3.38E-10
S	Inhalation	SW	991	2.10E-08	2.90E-10
S	Inhalation	WSW	1158	2.40E-08	3.87E-10
S	Inhalation	W	1105	6.44E-08	8.39E-10
S	Inhalation	WNW	1198	3.95E-08	6.38E-10
S	Inhalation	NW	1104	4.10E-08	6.56E-10

SITE: LIMERICK GENERATING STATION – UNITS 1 & 2
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Table D – 12 Annual x/Q and D/Q values for the South Stack, Limerick Generating Station, 2012

Limerick Generating Station
x/Q and D/Q values

South Stack - Flow = 187000 cfm				X/Q (s/m^3)	D/Q (1/m^2)
Stack ID	Location	Direction	Range (m)	Undepleted	
S	Inhalation	NNW	1540	3.83E-08	5.56E-10
S	Vegetation	N	1017	7.01E-08	1.02E-09
S	Vegetation	NNE	2929	6.18E-08	4.10E-10
S	Vegetation	NE	1065	4.41E-08	1.02E-09
S	Vegetation	ENE	4561	5.17E-08	1.46E-10
S	Vegetation	E	3849	9.60E-08	3.86E-10
S	Vegetation	ESE	555	2.93E-07	4.87E-09
S	Vegetation	SE	390	8.99E-07	1.37E-08
S	Vegetation	SSE	2102	8.41E-08	8.72E-10
S	Vegetation	S	1860	4.14E-08	4.22E-10
S	Vegetation	SSW	1622	2.71E-08	3.25E-10
S	Vegetation	SW	1390	1.99E-08	2.98E-10
S	Vegetation	WSW	3662	4.95E-08	2.16E-10
S	Vegetation	W	1283	6.07E-08	7.85E-10
S	Vegetation	WNW	1198	3.95E-08	6.38E-10
S	Vegetation	NW	2490	3.48E-08	2.76E-10
S	Vegetation	NNW	2166	3.95E-08	3.67E-10
S	Meat	N	7551	3.92E-08	8.82E-11
S	Meat	ENE	6264	4.73E-08	9.21E-11
S	Meat	SE	3331	1.59E-07	1.22E-09
S	Meat	S	6741	4.08E-08	9.07E-11
S	Meat	SSW	3167	3.73E-08	1.78E-10
S	Meat	SW	5653	3.39E-08	8.98E-11
S	Meat	WSW	4321	4.88E-08	1.80E-10
S	Meat	W	4467	6.01E-08	2.55E-10
S	Cow	N	7551	3.92E-08	8.82E-11
S	Cow	S	6741	4.08E-08	9.07E-11
S	Cow	SSW	3167	3.73E-08	1.78E-10
S	Cow	WSW	4321	4.88E-08	1.80E-10
S	Cow	W	4467	6.01E-08	2.55E-10
S	Garden	ESE	2198	1.27E-07	1.14E-09
S	Garden	SE	1972	1.98E-07	2.34E-09

Appendix D
ODCM Revision 26 Changes

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

Change Matrix for ODCM Revision 26

Change Type – A **Administrative Changes**
Change Type – T **Technical Changes**

Item No.	Rev 25 Page	Rev 26 Page	Change and Reason	Change Type
1.	7	7	Combined Table of Contents Sections 1.2.2 and 1.2.3. **Reason:** Changed to match the title of the actual section.	A
2.	20	20	Changed Applicability wording from 'At all times' to 'As shown in Table 3.1-1. **Reason:** A column for applicability of radiation monitor actions has been added.	A
3.	21	21	Added a column for applicability **Reason:** There have been questions on applicability when systems are drained. This change will clarify when the action statements apply.	A
4.	22	22	**Action 101** Wording revised to reflect wording provided in NUREG 1302. **Reason:** NUREG 1302, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Boiling Water Reactors." Is used as a standard for implementing the ODCM. Chemistry procedure CY-AA-170-300, Offsite Dose Calculation Manual Administration directs that the ODCM use the guidance of this NUREG. Using the guidance in this NUREG provides clarified guidance when monitors are declared inoperable for long periods of time.	A
5.	54 112 336	54 112 321	Replaced thermoluminescent (TLD) with dosimeter (meaning OSL, TLD, or similar). **Reason:** Dosimeter type has changed from a TLD to an OSL type dosimeter. This change to a generic term will incorporate any future changes of dosimeter types.	A
6.	111	111	Changed subscript of the total dose at receptor from D_{TTLD} to D_{TD}. This change was made to equations 4-1, 4-2, and 4-3. **Reason:** Dosimeter type has changed from a TLD to an OSL type dosimeter. This change to a generic term will incorporate any future changes of dosimeter types.	A

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Change Matrix for ODCM Revision 26

Change Type – A **Administrative Changes**
Change Type – T **Technical Changes**

Item No.	Rev 25 Page	Rev 26 Page	Change and Reason	Change Type
7.	204	189	Adjusted value of Tb for Approximate midpoint of facility operating life (years). The Approximate midpoint of facility operating life (years) changed from 15 years to 25 years. **Reason:** Reg Guide 1.109 App A, Equation A-4 adjusted for license renewal.	T
8.	238-253	223-238	Changed Tables II2-10, II2-11, II2-12, II2-13 heading from Vegetation to Green Leafy Vegetation. **Reason:** Changed to make it a more descriptive heading.	A
9.	154-158 169-173 184-188	149-152 161-164 173-176	Adjusted Adult Shoreline A_{IT} Dose Factors. Adjusted Teen Shoreline A_{IT} Dose Factors. Adjusted Child Shoreline A_{IT} Dose Factors. **Reason:** Changed because of rounding and typos.	A
10.	222-225 226-229 230-233 234-237	207-210 211-214 215-218 219-222	Adjusted Adult Ground Plane R_i Dose Factors. Adjusted Teen Ground Plane R_i Dose Factors. Adjusted Child Ground Plane R_i Dose Factors. Adjusted Infant Ground Plane R_i Dose Factors. **Reason:** Changed because of rounding and typos.	A
11.	238-241 242-245 246-249	223-226 227-230 231-234	Adjusted Adult Leafy Vegetation R_i Dose Factors. Adjusted Teen Leafy Vegetation R_i Dose Factors. Adjusted Child Leafy Vegetation R_i Dose Factors. **Reason:** Changed because of rounding and typos.	A
12.	254-257 258-261 262-265 266-269	239-242 243-246 247-250	Adjusted Adult Meat R_i Dose Factors. Adjusted Teen Meat R_i Dose Factors. Adjusted Child Meat R_i Dose Factors. **Reason:** Changed because of rounding and typos.	A
13.	270-273 274-277 278-281 282-285	255-258 259-262 263-266 267-270	Adjusted Adult Cow Milk R_i Dose Factors. Adjusted Teen Cow Milk R_i Dose Factors. Adjusted Child Cow Milk R_i Dose Factors. Adjusted Infant Cow Milk R_i Dose Factors. **Reason:** Changed because of rounding and typos.	A

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Change Matrix for ODCM Revision 26

Change Type – A **Administrative Changes**
Change Type – T **Technical Changes**

Item No.	Rev 25 Page	Rev 26 Page	Change and Reason	Change Type
14.	286-289 290-293 294-297 298-301	271-274 275-278 279-282 283-286	Adjusted Adult Goat Milk R_i Dose Factors. Adjusted Teen Goat Milk R_i Dose Factors. Adjusted Child Goat Milk R_i Dose Factors. Adjusted Infant Goat Milk R_i Dose Factors. **Reason:** Changed because of rounding and typos.	A
15.	322	307	Adjusted value of t for Period of buildup of activity in soil (sec). This is the number is seconds in 25 years. This was adjusted due to the approximate midpoint of facility operating life (years) changing from 15 years to 25 years. **Reason:** Reg Guide 1.109 App C, Equation C-1 adjusted for license renewal.	T
16.	322	307	Adjusted value of Tb for Approximate midpoint of facility operating life (years). The Approximate midpoint of facility operating life (years) changed from 15 years to 25 years. **Reason:** Reg Guide 1.109 App C, Equation C-1 adjusted for license renewal.	T
17.	323	308	Updated X/Q and D/Q factors **Reason:** 2011 Meteorology data indicated that the W sector garden had the highest X/Q and D/Q, therefore should be used as the ODCM sector values.	T
18.	324	309	Asterisks added to ESE and SE Vegetation Pathway. **Reason:** Asterisks indicate those gardens are the REMP Gardens.	A
19.	331	316	Added NPDES Outfall 001 to the Radwaste schematic. **Reason:** Provides clarification of the actual release point identification.	A
20.	337	322	Removed 13C1 and added 15D1 and associated location under Airborne Particulates and Iodine. **Reason:** 13C1 was removed because it was located in the middle of a housing complex. 15D1 replaced it because it is located in the same SE sector at a similar distance. 15D1 location was already equipped with an air sampler.	A