

Exelon Generation Company, LLC
Braidwood Station
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April 28, 2010
BW100044

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

Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456 and STN 50-457

Subject: 2009 Radioactive Effluent Release Report

The attached document includes the Radioactive Effluent Release Report for Braidwood Station. This report is being submitted in accordance with 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors," and Technical Specification 5.6.3, "Radioactive Effluent Release Report," and includes a summary of radiological liquid and gaseous effluents and solid waste released from the site from January 2009 through December 2009.

If you have any questions regarding this information, please contact Mr. Ron Gaston, Regulatory Assurance Manager, at (815) 417-2800.

Respectfully,



Amir Shahkarami
Site Vice President
Braidwood Station

cc: US NRC Regional Administrator, Region III
US NRC Senior Resident Inspector - Braidwood Station
NRR Project Manager - Braidwood Station
Illinois Emergency Management Agency - Division of Nuclear Safety

IE48
NRR

RADIOACTIVE EFFLUENT RELEASE REPORT

January - December 2009

Facility: BRAIDWOOD NUCLEAR POWER STATION

Licensee: EXELON GENERATION COMPANY, LLC

1. Regulatory Limits

a. For Noble Gases:

Dose Rate

- 1) Less than 500 mrem/year to the whole body.
- 2) Less than 3000 mrem/year to the skin.

Dose Gamma Radiation

- 1) Less than or equal to 5 mrad/quarter.
- 2) Less than or equal to 10 mrad/year.

Dose Beta Radiation

- 1) Less than or equal to 10 mrad/quarter.
- 2) Less than or equal to 20 mrad/year.

b. Iodine: (summed with particulate, see below)

c. Particulates with half-lives > 8 days:

Dose Rate

- 1) Less than 1500 mrem/year to any organ.

Dose

- 1) Less than or equal to 7.5 mrem/quarter to any organ.
- 2) Less than or equal to 15 mrem/year to any organ.

d. For Liquid

Dose

- 1) Less than or equal to 1.5 mrem to the whole body during any calendar quarter.
- 2) Less than or equal to 5 mrem to any organ during any calendar quarter.
- 3) Less than or equal to 3 mrem to the whole body during any calendar year.
- 4) Less than or equal to 10 mrem to any organ during any calendar year.

2. Maximum Permissible Concentration

- a. Fission and Activation Gases: 10CFR20 Appendix B Table 2
- b. Iodine: 10CFR20 Appendix B Table 2
- c. Particulates: 10CFR20 Appendix B Table 2
- d. Liquid Effluents: 10 X 10CFR20 Appendix B Table 2

3. Average Energy

This item is not applicable. Release rates are calculated using an isotopic mix rather than average energy.

4. Measurements and Approximations of Total Radioactivity

a. Fission and Activation Gases, Iodines, and Particulates

Containment batch releases are analyzed for noble gas and tritium before being discharged by gamma isotopic and scintillation, respectively. Gaseous decay tanks are analyzed for noble gas before being discharged by gamma isotopic. Released activity is normally calculated using volume of release, which is determined by change in tank or containment pressure.

The Auxiliary Building ventilation exhaust system is continually monitored for iodines and particulates. These samples are pulled every 7 days and analyzed by gamma isotopic. The particulate samples are also analyzed quarterly for gross alpha and Sr-89/90.

Noble gas and tritium grab samples are pulled and analyzed weekly by gamma isotopic and scintillation, respectively. The average flow at the release points are used to calculate the curies released.

Volumes and activities of effluents discharged from systems that are common to both units are divided between both units.

The secondary side of both units contain tritium. Very small amounts of tritium are continually released to the atmosphere from secondary components through packing leaks, tank vents, the main condenser, etc. Bounding calculations have been performed to show that very large leaks (1000 gpd) for extended periods (1 month) at normal secondary tritium concentrations, would provide an insignificant increase (1E-5 mrem) in offsite dose.

No gaseous effluent radiation instrumentation was inoperable beyond the time allowed in the ODCM during 2009.

The calculated offsite dose to the public from station gaseous effluents remains low and a small percentage of the quarterly and annual Offsite Dose Calculation Manual (ODCM) limits.

b. Liquid Effluents

The liquid release tanks are analyzed before discharge by gamma isotopic and for tritium. A representative portion of this sample is saved. This is composited, every 31 days, with other discharges that occurred and is analyzed for tritium and gross alpha. The batch composites are composited quarterly and sent to a vendor for Sr-89/90 and Fe-55 analysis. Circulating Water Blowdown, Condensate Polisher Sump and Waste Water Treatment are analyzed weekly by gamma isotopic and for tritium. These weekly samples are composited monthly. The monthly composites are then composited quarterly and sent to a vendor for Sr-89/90 and Fe-55 analysis.

Tank volumes and activities are used to calculate the curies released for the tanks released. The total volume of water released and the measured activity is used to calculate the diluted activity released at the discharge point from batch discharges.

4. b. Volumes and activities of effluents discharged from systems that are common to both units are divided between both units.

Due to extreme cold weather, the Exelon Pond composite sampler experienced frozen components and not enough sample was collected for the week of 1/12/09 to 1/19/09 to allow valid analysis. The condition was corrected with the installation of backup sample tubing and the composite sampler provided normal sampling the following week.

On 1/21/09, due to extreme cold weather, the Circulating Water Blowdown composite sampler suction hose was frozen for one day. The condition was corrected with the installation of a backup sample line. The weekly composite sample for 1/19/09 to 1/26/09 did not contain sample for 1/21/09.

On 4/27/09, the Exelon Pond pump composite sampler had no weekly sample. The pond pump was operating during the week and a sample should have been collected. At the time this problem was identified, the pond pump had been shut down and sampler troubleshooting could not be performed. The next time the pump was operated on 4/30/09, troubleshooting revealed that the sample aliquot timer needed adjustment. The timer was adjusted and proper sample collections were restored.

On 7/14/09, the Vacuum Breaker #1 compositor sample isolation valve was identified as not functioning due to build up of iron deposits from the ground water pumped through the system. No sample was being collected. A work request was created and the sample valve was cleaned on 7/15/09. The sample valve function returned to normal and subsequently provided the needed samples.

On 11/23/09, the Exelon Pond composite sampler did not have a sample for the week of 11/16/09 to 11/23/09. A review of the Operations logs revealed that the Exelon Pond pump ran only 73 minutes during the week. Since the Exelon Pond composite sampler only samples every two hours, this short pump run time during this week did not allow enough run time for a valid sample to be collected. The sampler was checked on 11/23/09 and verified functioning properly, and a valid sample was collected the following week.

On 12/7/09, the Exelon Pond composite sampler did not have a valid weekly sample. Following the discovery of a lack of sample, the composite sampler was checked and was functioning properly. No cause for the missed sample could be determined and a valid sample was collected the following week.

A review of these events indicates four lack of sample events related to Exelon Pond sampling. An issue report has been entered into the station Corrective Action Program to evaluate enhancements to the sample system monitoring and/or maintenance to improve performance.

There were two incidents of liquid effluent radiation instrumentation being inoperable beyond the time allowed in the ODCM during 2009. These event descriptions are located on page 19, item 5.

The calculated offsite dose to the public from station liquid effluents remains low and a small percentage of the quarterly and annual Offsite Dose Calculation Manual (ODCM) limits.

- c. Less than the lower limit of detection (<LLD).

Samples are analyzed such that the Offsite Dose Calculation Manual (ODCM) LLD requirements are met. When a nuclide is not detected during the quarter then <LLD is reported.

4. d. Errata for Previous Annual Radioactive Effluent Release Reports

The text portion of the 2008 Annual Radioactive Effluent Release Report listed three abnormal gaseous releases. Two of those abnormal releases were Unit Common released and were properly listed in the second quarter of 2008 on the Unit Common Gaseous Effluents Supplemental Release Information. The third abnormal release was a Unit 2 release. This release was inadvertently left out of the Unit 2 Gaseous Effluents Supplemental Release Information table. It should have been listed in the second quarter of the Unit 2 Gaseous Effluents Supplemental Release Information as shown below:

GASEOUS EFFLUENTS
SUPPLEMENTAL RELEASE INFORMATION

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
B. Abnormal Releases					
1. Number of Releases	0	1	0	0	1
2. Total Activity Released (Ci)	0	8.40E+00	0	0	8.40E+00

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
GAS RELEASES
UNIT 1 (Docket Number 50-456)
SUMMATION OF ALL RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Est. Total Error%
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A. Fission and Activation Gas Releases

1. Total Release Activity	Ci	8.16E-01	7.89E-01	9.43E-01	2.62E+00	7.59
2. Average Release Rate	μCi/sec	1.05E-01	1.00E-01	1.19E-01	3.30E-01	
3. Percent of ODCM Limit - gamma	%	5.20E-05	1.58E-04	2.34E-04	5.84E-04	
4. Percent of ODCM Limit - beta	%	1.98E-04	3.84E-04	5.67E-04	1.17E-03	

B. Iodine Releases

1. Total I-131 Activity	Ci	7.47E-05	3.23E-04	<LLD	1.07E-05	33.20
2. Average Release Rate	μCi/sec	9.61E-06	4.11E-05	0.00E+00	1.35E-06	
3. Percent of ODCM Limit - gamma	%	2.31E-01	9.80E-01	0.00E+00	1.08E+00	

C. Particulate (> 8 day half-life) Releases

1. Gross Activity	Ci	3.62E-05	3.46E-06	2.83E-06	5.99E-05	19.80
2. Average Release Rate	μCi/sec	4.66E-06	4.45E-07	3.56E-07	7.54E-06	
3. Percent of ODCM Limit	%	2.31E-01	9.80E-01	1.00E+00	1.08E+00	
4. Gross Alpha Activity	Ci	<LLD	<LLD	<LLD	<LLD	

D. Tritium Releases

1. Total Release Activity	Ci	9.55E+01	9.08E+01	2.12E+01	3.68E+01	8.07
2. Average Release Rate	μCi/sec	1.23E+01	1.15E+01	2.67E+00	4.63E+00	
3. Percent of ODCM Limit	%	2.31E-01	9.80E-01	1.00E+00	1.08E+00	

Note: LLD Values are included in Appendix A of this report.

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
GAS RELEASES
UNIT 1 (Docket Number 50-456)
CONTINUOUS MODE AND BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1. Fission Gases									
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	6.59E-03
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	2.21E-01	<LLD	<LLD	<LLD
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	9.52E-04	<LLD	4.40E-03
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.60E-03
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.76E-03	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	5.72E-01	6.52E-01	9.31E-01	2.22E+00
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	1.15E-02	1.48E-02	5.60E-03	5.25E-02
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	1.09E-02	1.22E-01	1.75E-03	3.37E-01
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	<LLD	<LLD	<LLD	<LLD	8.16E-01	7.89E-01	9.43E-01	2.62E+00
2. Iodines									
I-131	Ci	1.50E-05	8.04E-05	<LLD	3.91E-06	<LLD	<LLD	<LLD	<LLD
I-132	Ci	<LLD	2.15E-04	<LLD	4.20E-06	<LLD	<LLD	<LLD	<LLD
I-133	Ci	5.97E-05	2.77E-05	<LLD	2.63E-06	<LLD	<LLD	<LLD	<LLD
I-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	7.47E-05	3.23E-04	<LLD	1.07E-05	<LLD	<LLD	<LLD	<LLD
3. Particulates									
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-57	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Br-82	Ci	3.62E-05	<LLD	2.83E-06	5.99E-05	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
GAS RELEASES
UNIT 1 (Docket Number 50-456)
CONTINUOUS MODE AND BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Sn-117m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Nd-147	Ci	<LLD	3.46E-06	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sn-113		<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	3.62E-05	3.46E-06	2.83E-06	5.99E-05	<LLD	<LLD	<LLD	<LLD
4. Tritium	Ci	7.80E+01	8.97E+01	2.09E+01	3.16E+01	1.74E+01	1.09E+00	2.43E-01	5.20E+00

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
GAS RELEASES
UNIT 2 (Docket Number 50-457)
SUMMATION OF ALL RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Est. Total Error%
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A. Fission and Activation Gas Releases

1. Total Activity Released	Ci	8.16E-01	7.89E-01	9.72E-01	3.40E+00	7.59
2. Average Release Rate	μCi/sec	1.05E-01	1.00E-01	1.22E-01	4.28E-01	
3. Percent of ODCM Limit - gamma	%	5.20E-05	1.58E-04	2.36E-04	6.49E-04	
4. Percent of ODCM Limit - beta	%	1.98E-04	3.84E-04	5.72E-04	1.33E-03	

B. Iodine Releases

1. Total I-131 Activity	Ci	<LLD	<LLD	3.68E-05	1.28E-04	33.20
2. Average Release Rate	μCi/sec	0.00E+00	0.00E+00	4.63E-06	1.61E-05	
3. Percent of ODCM Limit	%	0.00E+00	0.00E+00	9.26E-02	3.21E-01	

C. Particulate (> 8 day half-life) Releases

1. Gross Activity	Ci	1.29E-05	<LLD	8.20E-06	4.33E-07	19.80
2. Average Release Rate	μCi/sec	1.66E-06	0.00E+00	1.03E-06	5.45E-08	
3. Percent of ODCM Limit	%	1.62E-02	0.00E+00	9.26E-02	3.21E-01	
4. Gross Alpha Activity	Ci	<LLD	<LLD	<LLD	<LLD	

D. Tritium Releases

1. Total Release Activity	Ci	1.14E+01	2.97E+01	1.66E+01	2.98E+01	8.07
2. Average Release Rate	μCi/sec	1.47E+00	3.78E+00	2.09E+00	3.75E+00	
3. Percent of ODCM Limit	%	1.62E-02	5.83E-02	9.26E-02	3.21E-01	

Note: LLD Values are included in Appendix A of this report.

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
GAS RELEASES
UNIT 2 (Docket Number 50-457)
CONTINUOUS MODE AND BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1. Fission Gases									
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	6.59E-03
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	2.21E-01	<LLD	<LLD	<LLD
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	9.52E-04	<LLD	4.40E-03
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.60E-03
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	5.72E-01	6.52E-01	9.60E-01	3.00E+00
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	1.15E-02	1.48E-02	5.60E-03	5.25E-02
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	1.09E-02	1.22E-01	1.75E-03	3.37E-01
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	<LLD	<LLD	<LLD	<LLD	8.16E-01	7.89E-01	9.72E-01	3.40E+00
2. Iodines									
I-131	Ci	<LLD	<LLD	2.71E-06	2.46E-05	<LLD	<LLD	<LLD	<LLD
I-132	Ci	<LLD	<LLD	<LLD	8.38E-05	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	3.41E-05	1.99E-05	<LLD	<LLD	<LLD	<LLD
I-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	<LLD	<LLD	3.68E-05	1.28E-04	<LLD	<LLD	<LLD	<LLD
3. Particulates									
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-57	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-58	Ci	<LLD	<LLD	7.20E-06	<LLD	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Br-82	Ci	1.29E-05	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	9.99E-07	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
GAS RELEASES
UNIT 2 (Docket Number 50-457)
CONTINUOUS MODE AND BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Sn-117m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Nd-147	Ci	<LLD	<LLD	<LLD	4.33E-07	<LLD	<LLD	<LLD	<LLD
Te-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sn-113	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	1.29E-05	<LLD	8.20E-06	4.33E-07	<LLD	<LLD	<LLD	<LLD
4. Tritium	Ci	8.70E+00	2.90E+01	1.64E+01	2.64E+01	2.70E+00	6.55E-01	2.80E-01	3.38E+00

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
LIQUID RELEASES
UNIT 1 (Docket Number 50-456)
SUMMATION OF ALL RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Est. Total Error %
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A. Fission and Activation Products

1. Total Activity Released	Ci	2.62E-03	2.56E-02	7.73E-02	3.05E-02	2.64
2. Average Concentration Released	μCi/ml	4.45E-10	8.61E-09	1.78E-08	6.86E-09	
3. Percent of limit	%	*	*	*	*	

B. Tritium

1. Total Activity Released	Ci	8.42E+01	1.48E+02	1.03E+02	1.94E+02	5.85
2. Average Concentration Released	μCi/ml	1.43E-05	4.98E-05	2.38E-05	4.36E-05	
3. % of Limit (1E-2 μCi/ml)	%	1.43E-01	4.98E-01	2.38E-01	4.36E-01	

C. Dissolved Noble Gases

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	7.15E-06	2.64
2. Average Concentration Released	μCi/ml	0.00E+00	0.00E+00	0.00E+00	1.61E-12	
3. % of Limit (2E-4 μCi/ml)	%	0.00E+00	0.00E+00	0.00E+00	8.04E-07	

D. Gross Alpha

1. Total Activity Released	Ci	2.17E-05	2.94E-05	2.29E-05	9.70E-05	14.70
2. Average Concentration Released	μCi/ml	3.69E-12	9.89E-12	5.28E-12	2.18E-11	

E. Volume of Releases

1. Volume of Liquid Waste to Discharge	liters	1.51E+05	3.81E+05	1.73E+05	4.39E+05	
2. Volume of Dilution Water	liters	5.89E+09	2.97E+09	4.33E+09	4.45E+09	

Note: LLD Values are included in Appendix A of this report.

Note: % Limit Values are included in Appendix B of this report.

*This limit is equal to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10CFR20.1001-20.2402.

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
LIQUID RELEASES
UNIT 1 (Docket Numbers 50-456)
CONTINUOUS MODE & BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
H-3	Ci	2.72E+01	2.94E+01	2.60E+01	3.32E+01	5.70E+01	1.18E+02	7.65E+01	1.61E+02
Gross Alpha	Ci	<LLD	<LLD	<LLD	<LLD	2.17E-05	2.94E-05	2.29E-05	9.70E-05
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	6.79E-05	<LLD	2.57E-04
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	1.29E-05	6.32E-05	6.73E-04	4.42E-04
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	4.97E-04	9.16E-04	7.94E-04	4.61E-03
Co-57	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	4.92E-05	3.81E-04	1.78E-04
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	1.59E-04	2.24E-02	6.97E-02	1.76E-02
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.01E-04	<LLD	1.70E-04
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	5.35E-04	1.10E-03	3.68E-03	5.60E-03
Ni-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Nb-95	Ci	<LLD	<LLD	<LLD	<LLD	6.21E-06	3.36E-05	1.03E-05	1.77E-04
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.12E-05	<LLD	5.06E-05
Nb-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.83E-05
Zr-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ru-103	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	2.59E-05	<LLD	8.00E-06
Sn-113	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	5.65E-06
Sn-117m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-122	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-123m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	2.75E-05	<LLD	8.21E-05
Sb-124	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-125	Ci	<LLD	<LLD	<LLD	<LLD	1.34E-03	7.82E-04	4.07E-04	5.32E-04
Te-125m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	3.80E-04
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
LIQUID RELEASES
UNIT 1 (Docket Numbers 50-456)
CONTINUOUS MODE & BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Ba-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	3.72E-05	1.21E-05	7.67E-04	1.19E-04
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-136	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	3.37E-05	1.04E-05	8.81E-04	1.46E-04
Cs-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-139	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.73E-05	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Np-239	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	2.72E+01	2.94E+01	2.60E+01	3.32E+01	5.70E+01	1.18E+02	7.66E+01	1.61E+02

BRAIDWOOD NUCLEAR POWER STATION
 ANNUAL EFFLUENT REPORT FOR 2009
 LIQUID RELEASES
 UNIT 2 (Docket Number 50-457)
 SUMMATION OF ALL RELEASES

Units	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Est. Total Error %
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A. Fission and Activation Products

1. Total Activity Released	Ci	2.62E-03	2.56E-02	7.73E-02	3.05E-02	2.64
2. Average Concentration Released	μCi/ml	4.45E-10	8.61E-09	1.78E-08	6.86E-09	
3. Percent of Limit	%	*	*	*	*	

B. Tritium

1. Total Activity Released	Ci	8.42E+01	1.48E+02	1.03E+02	1.94E+02	5.85
2. Average Concentration Released	μCi/ml	1.43E-05	4.98E-05	2.38E-05	4.36E-05	
3. % of Limit (1E-3 μCi/ml)	%	1.43E-01	4.98E-01	2.38E-01	4.36E-01	

C. Dissolved Noble Gases

1. Total Activity Released	Ci	<LLD	<LLD	<LLD	7.15E-06	2.64
2. Average Concentration Released	μCi/ml	0.00E+00	0.00E+00	0.00E+00	1.61E-12	
3. % of Limit (2E-4 μCi/ml)	%	0.00E+00	0.00E+00	0.00E+00	8.04E-07	

D. Gross Alpha

1. Total Activity Released	Ci	2.17E-05	2.94E-05	2.29E-05	9.70E-05	14.70
2. Average Concentration Released	μCi/ml	3.69E-12	9.89E-12	5.28E-12	2.18E-11	

E. Volume of Releases

1. Volume of Liquid Waste to Discharge	liters	1.51E+05	3.81E+05	1.73E+05	4.39E+05	
2. Volume of Dilution Water	liters	5.89E+09	2.97E+09	4.33E+09	4.45E+09	

Note: LLD Values are included in Appendix A of this report.

Note: % Limit Values are included in Appendix B of this report.

*This limit is equal to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10CFR20.1001-2402.

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
LIQUID RELEASES
UNIT 2 (Docket Numbers 50-457)
CONTINUOUS MODE & BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
H-3	Ci	2.72E+01	2.94E+01	2.60E+01	3.32E+01	5.70E+01	1.18E+02	7.65E+01	1.61E+02
Gross Alpha	Ci	<LLD	<LLD	<LLD	<LLD	2.17E-05	2.94E-05	2.29E-05	9.70E-05
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	6.79E-05	<LLD	2.57E-04
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	1.29E-05	6.32E-05	6.73E-04	4.42E-04
Fe-55	Ci	<LLD	<LLD	<LLD	<LLD	4.97E-04	9.16E-04	7.94E-04	4.61E-03
Co-57	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	4.92E-05	3.81E-04	1.78E-04
Co-58	Ci	<LLD	<LLD	<LLD	<LLD	1.59E-04	2.24E-02	6.97E-02	1.76E-02
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.01E-04	<LLD	1.70E-04
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	5.35E-04	1.10E-03	3.68E-03	5.60E-03
Ni-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Nb-95	Ci	<LLD	<LLD	<LLD	<LLD	6.21E-06	3.36E-05	1.03E-05	1.77E-04
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.12E-05	<LLD	5.06E-05
Nb-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.83E-05
Zr-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ru-103	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	2.59E-05	<LLD	8.00E-06
Sn-113	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	5.65E-06
Sn-117m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-122	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-123m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	2.75E-05	<LLD	8.21E-05
Sb-124	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-125	Ci	<LLD	<LLD	<LLD	<LLD	1.34E-03	7.82E-04	4.07E-04	5.32E-04
Te-125m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	3.80E-04
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD

BRAIDWOOD NUCLEAR POWER STATION
ANNUAL EFFLUENT REPORT FOR 2009
LIQUID RELEASES
UNIT 2 (Docket Numbers 50-457)
CONTINUOUS MODE & BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Ba-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	3.72E-05	1.21E-05	7.67E-04	1.19E-04
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-135	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-136	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	3.37E-05	1.04E-05	8.81E-04	1.46E-04
Cs-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ba-139	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.73E-05	<LLD	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-141	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ce-144	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Np-239	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	2.72E+01	2.94E+01	2.60E+01	3.32E+01	5.70E+01	1.18E+02	7.66E+01	1.61E+02

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 SOLID RADIOACTIVE WASTE
 UNIT 1 AND 2 COMBINED (Docket Numbers 50-456 and 50-457)

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Types of Waste

Types of Waste	Total Quantity (m ³)	Total Activity (Ci)	Period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc	1.47E+02	4.33E+01	Jan - Dec 2009	25
b. Dry compressible waste, contaminated equip, etc	2.79E+02	5.64E+00	Jan - Dec 2009	25
c. Irradiated components, control rods, etc	0	0	Jan - Dec 2009	N/A
d. Other (oil, reverse osmosis reject water, soil, Lagoon sediment)	1.19E+02	1.81E-02	Jan - Dec 2009	25

2. Estimate of major nuclide composition (by waste type)

Major Nuclide Composition		%
a.	Fe-55	20.71
	Cs-137	16.66
	Cs-134	16.37
	Ni-63	13.37
	H-3	9.50
	Co-58	9.42
	Co-60	9.14
	Sb-125	2.01
	Mn-54	1.66
	C-14	0.35
	Co-57	0.25
	Ni-59	0.17
	Zn-65	0.16

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 SOLID RADIOACTIVE WASTE
 UNIT 1 AND 2 COMBINED (Docket Numbers 50-456 and 50-457)

2. Estimate of major nuclide composition (by waste type) cont.

Major Nuclide Composition		%
b.	Ni-63	35.30
	Fe-55	31.97
	Co-60	16.80
	Co-58	5.58
	Cs-137	2.38
	H-3	2.00
	Cs-134	1.60
	C-14	1.29
	Mn-54	0.66
	Fe-59	0.61
	Nb-95	0.46
	Sb-125	0.44
	Ni-59	0.41
	Zr-95	0.25
c.	N/A	N/A
d.	Fe-55	42.60
	Ni-63	16.67
	Co-60	15.95
	Co-58	8.90
	H-3	7.01
	Cs-134	2.48
	Mn-54	1.01

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
7	Hittman Transportation	Clive Disposal Facility (containerized) - Clive, UT
9	Hittman Transportation	Duratek Services- Bear Creek Facility - Oak Ridge, TN
7	Hittman Transportation	Duratek Services - Gallaher Rd. - Kingston, TN
7	Visionary Solutions, LLC	Duratek Services - Gallaher Rd. - Kingston, TN

B. Irradiated Fuel Shipments (disposition)

No irradiated fuel shipments for January through December, 2009.

C. Changes to the Process Control Program

There were no changes to the process control program in 2009.

BRAIDWOOD NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
UNIT 1 AND 2 COMBINED (Docket Numbers 50-456 and 50-457)

1. In 2009, there were no changes to the Process Control Program.
2. In 2009, there were no changes to the station's radioactive waste systems.
3. There were no liquid release tanks or gas decay tanks which exceeded the limits addressed in the ODCM-RETS.
4. There were no abnormal liquid releases in 2009 resulting in offsite discharge.

On 6/30/09, a spill of U2 secondary water containing tritium occurred when a sump overflowed. The water flowed out of the Condensate Polisher Room to the ground and to a storm sewer. The storm sewer water was immediately pumped back to the plant drain system and sampling was initiated at downstream points to ensure that the contaminated water did not leave site.

One abnormal gaseous release occurred in 2009 and is described below.

On July 30, 2009, Unit 2 tripped and steam containing tritium was released to the atmosphere through the steam generator power operated relief valves (PORVs). The plant performed as designed and when these valves opened and intermittently as the plant was cooled down. The steam release continued periodically for approximately 30 hours until normal cooling was restored to the unit. At the time of this release, Unit 2 secondary tritium concentration was $3.86E-5$ $\mu\text{Ci/g}$. A conservative release permit was performed in the Radioactive Effluent Tracking and Dose Assessment Software (RETDAS). Permit #2010007 was used to calculate offsite dose from the release. The calculated dose was insignificant.

5. The following effluent monitoring instruments exceeded their specified inoperability time.

0F-WX001 (Liquid Radwaste Effluent Line Loop WX001) exceeded its specified inoperability time on 4/24/07. At that time, required surveillances for this effluent instrument were taken to "suspend" and were not performed because this effluent flow path was no longer in use at Braidwood Station. The instrument continues to be inoperable and no liquid releases have taken place through this release path during the time of inoperability. A design change and modification to this flow path are in progress. Required surveillances will be performed prior to this flow path being put back in service.

One liquid effluent radiation instrument was inoperable beyond the time allowed in the ODCM. On 10/26/09, 0RE-PR001, Liquid Radwaste Effluent Line Radiation Monitor, was declared inoperable and entered the 14 day time clock established in the ODCM. Liquid radwaste releases were performed within the 14 days using the guidance established in the ODCM and station Operating procedures. 0RE-PR001 was not declared operable by the end of the 14 day period on 11/8/09, and liquid radwaste releases were suspended until the monitor was declared operable. Work was completed and the monitor was declared operable on 11/10/09.

6. No changes were made to the ODCM in 2009.
7. NUREG-0543, Methods for Demonstrating LWR Compliance with the EPA Uranium Fuel Cycle Standard (40 CFR Part 190) states in section IV, "As long as a nuclear plant site operates at a level below the Appendix I reporting requirements, no extra analysis is required to demonstrate compliance with the 40 CFR Part 190." The organ and whole body doses reported on pages 28 through 47 are determined using 10 CFR 50 Appendix I methodology. The doses are below the limits of Appendix I.

BRAIDWOOD NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)

APPENDIX A

LLD Tables

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)
 LLD VALUES FOR GASEOUS RELEASES

<u>Isotope</u>	<u>LLD (Ci/ml)</u>
Alpha	7.11E-19
H-3	8.03E-14
Ar-41	7.63E-13
Mn-54	1.89E-18
Co-57	1.02E-18
Co-58	5.67E-19
Fe-59	3.64E-18
Co-60	8.94E-19
Zn-65	4.80E-18
Br-82	7.44E-19
Kr-85	5.83E-11
Kr-85m	7.03E-13
Kr-87	7.59E-13
Kr-88	3.18E-12
Sr-89	1.41E-20
Sr-90	2.71E-21
Mo-99	9.37E-19
I-131	8.96E-19
I-132	2.38E-17
I-133	1.17E-18
Xe-131m	1.82E-11
Xe-133	1.27E-12
Xe-133m	4.87E-12
Cs-134	2.25E-18
I-135	2.88E-18
Xe-135	5.17E-13
Xe-135m	1.48E-11
Cs-137	2.18E-18
Xe-138	4.65E-11
Ba-139	1.04E-15
Ba-140	4.45E-18
La-140	3.64E-18
Ce-141	1.78E-18
Ce-144	7.93E-18

NOTE: LLD Value for total activity released is based on LLD values for individual isotopes used in the calculation.

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)
 LLD VALUES FOR LIQUID RELEASES

<u>Isotope</u>	<u>LLD (Ci/ml)</u>
Alpha	4.90E-14
H-3	8.00E-12
Ar-41	3.73E-14
Cr-51	4.46E-13
Mn-54	1.56E-14
Fe-55	6.99E-13
Co-57	4.64E-14
Co-58	4.39E-14
Fe-59	3.94E-14
Co-60	9.40E-14
Zn-65	4.04E-14
Sr-89	4.00E-14
Sr-90	9.23E-15
Nb-95	1.64E-14
Zr-95	1.22E-13
Nb-97	1.51E-13
Mo-99	2.94E-13
Tc-99m	3.00E-13
Ag-110m	7.89E-14
Sb-124	5.43E-14
Sb-125	1.87E-13
Te-125m	1.62E-11
I-131	1.36E-13
Xe-133	1.41E-13
Cs-134	5.02E-14
Cs-137	6.50E-14
Ba-139	3.57E-13
Ba-140	1.50E-13
La-140	5.89E-13
Ce-141	9.35E-14
Ce-144	3.48E-13
Kr-85	9.29E-12
Nb-95	1.64E-14
Sb-122	4.32E-13
Te-123m	4.92E-14
Te-132	2.28E-13
I-132	5.93E-14
I-133	2.37E-11
Cs-136	9.72E-14
Xe-133m	3.81E-13
Xe-131m	1.72E-12
Np-239	1.64E-12
Ba-133	6.31E-14
Xe-135	2.43E-13

NOTE: LLD Value for Total Activity Released is based on LLD Values for individual isotopes used in the calculation.

BRAIDWOOD NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)

APPENDIX B

Supplemental Information

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 UNIT COMMON

GASEOUS EFFLUENTS
 SUPPLEMENTAL RELEASE INFORMATION

A. Batch Release	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
1. Total Number of Batch Releases	7	8	9	16	40
2. Total Time Period for Batch Releases (minutes)	1,270	2,501	2,072	3,122	8,965
3. Maximum Time Period for a Batch Release (minutes)	391	621	912	1,530	N/A
4. Average Time Period for a Batch Release (minutes)	181	313	230	195	N/A
5. Minimum Time Period for a Batch Release (minutes)	4	150	69	7	N/A
B. Abnormal Releases					
1. Number of Releases	0	0	0	0	0
2. Total Activity Released (Ci)	0	0	0	0	0

BRAIDWOOD NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
UNIT 1 (Docket Number 50-456)

GASEOUS EFFLUENTS
SUPPLEMENTAL RELEASE INFORMATION

A. Batch Release	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
1. Total Number of Batch Releases	51	21	18	20	110
2. Total Time Period for Batch Releases (minutes)	34,942	11,812	1,041	9,875	57,670
3. Maximum Time Period for a Batch Release (minutes)	1,920	6,570	491	2,150	N/A
4. Average Time Period for a Batch Release (minutes)	685	562	58	494	N/A
5. Minimum Time Period for a Batch Release (minutes)	10	17	16	35	N/A
B. Abnormal Releases					
1. Number of Releases	0	0	0	0	0
2. Total Activity Released (Ci)	0	0	0	0	0

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 UNIT 2 (Docket Number 50-457)

GASEOUS EFFLUENTS
 SUPPLEMENTAL RELEASE INFORMATION

A. Batch Release	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
1. Total Number of Batch Releases	22	19	20	23	84
2. Total Time Period for Batch Releases (minutes)	3,649	4,291	931	14,983	23,854
3. Maximum Time Period for a Batch Release (minutes)	1,660	3,590	304	3,920	N/A
4. Average Time Period for a Batch Release (minutes)	166	226	47	651	N/A
5. Minimum Time Period for a Batch Release (minutes)	11	19	16	13	N/A
B. Abnormal Releases					
1. Number of Releases	0	0	1	0	1
2. Total Activity Released (Ci)	0	0	1.37E-02	0	1.37E-02

BRAIDWOOD NUCLEAR POWER STATION
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
 UNIT 1 AND 2 COMBINED (Docket Numbers 50-456 and 50-457)
 BRAIDWOOD NUCLEAR POWER STATION

LIQUID EFFLUENTS

SUPPLEMENTAL RELEASE INFORMATION

A. Batch Release	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
1. Total Number of Batch Releases	8	21	11	26	66
2. Total Time Period for Batch Releases (minutes)	1,898	4,777	2,421	6,076	15,172
3. Maximum Time Period for a Batch Release (minutes)	268	267	237	310	N/A
4. Average Time Period for a Batch Release	237	227	220	234	N/A
5. Minimum Time Period for a Batch Release (minutes)	205	39	201	7	N/A
6. Average Stream Flow During Periods of Release of Effluent into a Flowing Stream (liters/min)	2.20E+07	1.32E+07	2.63E+06	1.05E+07	N/A
B. Abnormal Releases					
1. Number of Releases	0	0	0	0	0
2. Total Activity Released (Ci)	0.00+00	0.00+00	0.00+00	0.00E+00	0.00E+00

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 1

=== RELEASE DATA ===
 Total Release Duration (minutes)..... 3.549E+05
 Total Release Volume (cf)..... 4.568E+10
 Average Release Flowrate (cfm)..... 1.287E+05
 Average Period Flowrate (cfm)..... 8.691E+04

=== NUCLIDE DATA ===

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
AR-41	6.59E+03	5.10E-12	5.10E-04	1.00E-08
KR-85M	5.35E+03	4.14E-12	4.14E-05	1.00E-07
KR-85	2.21E+05	1.71E-10	2.44E-04	7.00E-07
XE-133M	8.44E+04	6.53E-11	1.09E-04	6.00E-07
KR-88	2.60E+03	2.01E-12	2.23E-04	9.00E-09
XE-131M	4.76E+03	3.68E-12	1.84E-06	2.00E-06
XE-135	4.72E+05	3.65E-10	5.21E-03	7.00E-08
XE-133	4.37E+06	3.38E-09	6.76E-03	5.00E-07
F&AG	5.17E+06	4.00E-09	1.31E-02	
I-131	9.93E+01	7.68E-14	3.84E-04	2.00E-10
I-132	2.19E+02	1.69E-13	8.46E-06	2.00E-08
I-133	9.01E+01	6.96E-14	6.96E-05	1.00E-09
Iodine	4.08E+02	3.16E-13	4.62E-04	
BR-82	9.89E+01	7.65E-14	1.53E-05	5.00E-09
Other	9.89E+01	7.65E-14	1.53E-05	
H-3	2.44E+08	1.89E-07	1.89E+00	1.00E-07
H-3	2.44E+08	1.89E-07	1.89E+00	
ND-147	3.46E+00	2.68E-15	2.68E-06	1.00E-09
P>=8	3.46E+00	2.68E-15	2.68E-06	

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
 (Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 1

=== NUCLIDE DATA =====

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
-----	-----	-----	-----	-----
Total	2.49E+08	1.93E-07	1.90E+00	

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 1
 Receptor.....: 5 Composite Crit. Receptor - IP
 Distance (meters)....: 0.0
 Compass Point.....: 0.0

=== PERIOD DOSE BY AGEGROUP, PATHWAY, ORGAN (mrem) ===

Age/Path	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
AGPD	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	0.00E+00	1.16E-06
AINHL	1.31E-07	6.46E-03	6.51E-03	6.46E-03	6.46E-03	6.46E-03	0.00E+00	6.46E-03
AVEG	4.27E-06	1.16E-02	1.36E-02	1.16E-02	1.16E-02	1.16E-02	0.00E+00	1.16E-02
AGMILK	1.86E-05	8.01E-03	1.66E-02	8.03E-03	7.98E-03	7.99E-03	0.00E+00	8.00E-03
ACMEAT	5.55E-07	1.67E-03	1.93E-03	1.67E-03	1.67E-03	1.67E-03	0.00E+00	1.67E-03
ACMILK	1.55E-05	3.93E-03	1.11E-02	3.95E-03	3.91E-03	3.92E-03	0.00E+00	3.92E-03
TGPD	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	0.00E+00	1.16E-06
TINHL	1.84E-07	6.52E-03	6.58E-03	6.52E-03	6.52E-03	6.52E-03	0.00E+00	6.52E-03
TVEG	4.06E-06	1.33E-02	1.49E-02	1.33E-02	1.33E-02	1.33E-02	0.00E+00	1.33E-02
TGMILK	3.37E-05	1.04E-02	2.41E-02	1.05E-02	1.04E-02	1.04E-02	0.00E+00	1.04E-02
TCMEAT	4.61E-07	9.93E-04	1.18E-03	9.94E-04	9.92E-04	9.93E-04	0.00E+00	9.93E-04
TCMILK	2.81E-05	5.13E-03	1.65E-02	5.16E-03	5.09E-03	5.10E-03	0.00E+00	5.11E-03
CGPD	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	0.00E+00	1.16E-06
CINHL	2.49E-07	5.75E-03	5.83E-03	5.75E-03	5.75E-03	5.75E-03	0.00E+00	5.75E-03
CVEG	7.56E-06	2.06E-02	2.31E-02	2.06E-02	2.06E-02	2.06E-02	0.00E+00	2.06E-02
CGMILK	8.18E-05	1.65E-02	4.36E-02	1.66E-02	1.65E-02	1.65E-02	0.00E+00	1.65E-02
CCMEAT	8.56E-07	1.20E-03	1.49E-03	1.20E-03	1.20E-03	1.20E-03	0.00E+00	1.20E-03
CCMILK	6.82E-05	8.13E-03	3.07E-02	8.18E-03	8.07E-03	8.07E-03	0.00E+00	8.10E-03
IGPD	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	1.16E-06	0.00E+00	1.16E-06
IINHL	1.97E-07	3.31E-03	3.38E-03	3.31E-03	3.31E-03	3.31E-03	0.00E+00	3.31E-03
IGMILK	1.71E-04	2.52E-02	9.08E-02	2.52E-02	2.50E-02	2.50E-02	0.00E+00	2.51E-02
ICMILK	1.42E-04	1.24E-02	6.72E-02	1.24E-02	1.22E-02	1.22E-02	0.00E+00	1.23E-02

=== PERIOD DOSE BY AGEGROUP, ORGAN (mrem) ===

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	4.02E-05	3.17E-02	4.98E-02	3.17E-02	3.16E-02	3.16E-02	0.00E+00	3.16E-02
TEEN	6.77E-05	3.63E-02	6.33E-02	3.64E-02	3.62E-02	3.63E-02	0.00E+00	3.63E-02
CHILD	1.60E-04	5.22E-02	1.05E-01	5.23E-02	5.21E-02	5.21E-02	0.00E+00	5.21E-02
INFANT	3.15E-04	4.09E-02	1.61E-01	4.09E-02	4.05E-02	4.05E-02	0.00E+00	4.07E-02

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 1
 Receptor.....: 5 Composite Crit. Receptor - IP
 Distance (meters)....: 0.0
 Compass Point.....: 0.0

=== MAXIMUM PERIOD DOSE TO LIMIT (Any Organ) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	INFANT	THYROID	1.61E-01	31-day	2.25E-01	7.17E+01	3.00E-01	5.38E+01
Qrtr->End	INFANT	THYROID	1.61E-01	Quarter	5.63E+00	2.87E+00	7.50E+00	2.15E+00
Year->End	INFANT	THYROID	1.61E-01	Annual	1.13E+01	1.43E+00	1.50E+01	1.08E+00

Critical Pathway.....: 3 Grs/Goat/Milk (GMILK)
 Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
H-3	2.51E+01
I-131	7.44E+01
I-132	9.36E-04
I-133	6.20E-01
ND-147	9.48E-06

=== MAXIMUM PERIOD DOSE TO LIMIT (Tot Body) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	CHILD	TBODY	5.21E-02	31-day	1.50E-01	3.48E+01	2.00E-01	2.61E+01
Qrtr->End	CHILD	TBODY	5.21E-02	Quarter	5.25E+00	9.93E-01	7.50E+00	6.95E-01
Year->End	CHILD	TBODY	5.21E-02	Annual	1.05E+01	4.97E-01	1.50E+01	3.48E-01

Critical Pathway.....: 2 Vegetation (VEG)
 Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
H-3	9.99E+01
I-131	1.73E-01
I-132	3.01E-04
I-133	2.01E-03
ND-147	2.95E-05

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 1
 Receptor.....: 4 Composite Crit. Receptor - NG
 Distance (meters)....: 0.0
 Compass Point.....: 0.0

=== MAXIMUM PERIOD NG DOSE TO LIMIT (Gamma) ===

Dose Period	Dose Type	Dose (mrad)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	Gamma	5.84E-05	31-day	1.50E-01	3.90E-02	2.00E-01	2.92E-02
Qrtr->End	Gamma	5.84E-05	Quarter	3.75E+00	1.56E-03	5.00E+00	1.17E-03
Year->End	Gamma	5.84E-05	Annual	7.50E+00	7.79E-04	1.00E+01	5.84E-04

Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
AR-41	2.37E+00
KR-85M	2.54E-01
KR-85	1.47E-01
XE-133M	1.07E+00
KR-88	1.52E+00
XE-131M	2.87E-02
XE-135	3.50E+01
XE-133	5.96E+01

=== MAXIMUM PERIOD NG DOSE TO LIMIT (Beta) ===

Dose Period	Dose Type	Dose (mrad)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	Beta	2.34E-04	31-day	3.00E-01	7.80E-02	4.00E-01	5.85E-02
Qrtr->End	Beta	2.34E-04	Quarter	7.50E+00	3.12E-03	1.00E+01	2.34E-03
Year->End	Beta	2.34E-04	Annual	1.50E+01	1.56E-03	2.00E+01	1.17E-03

Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
AR-41	3.40E-01
KR-85M	1.66E-01
KR-85	6.79E+00
XE-133M	1.97E+00
KR-88	1.20E-01
XE-131M	8.31E-02
XE-135	1.83E+01
XE-133	7.23E+01

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
 (Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 2

=== RELEASE DATA ===
 Total Release Duration (minutes)..... 3.271E+05
 Total Release Volume (cf)..... 3.158E+10
 Average Release Flowrate (cfm)..... 9.653E+04

Average Period Flowrate (cfm)..... 6.008E+04

=== NUCLIDE DATA ===

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
AR-41	6.59E+03	7.37E-12	7.37E-04	1.00E-08
KR-85M	5.35E+03	5.99E-12	5.99E-05	1.00E-07
KR-85	2.21E+05	2.47E-10	3.54E-04	7.00E-07
XE-133M	8.44E+04	9.44E-11	1.57E-04	6.00E-07
KR-88	2.60E+03	2.90E-12	3.23E-04	9.00E-09
XE-131M	4.76E+03	5.32E-12	2.66E-06	2.00E-06
XE-135	4.72E+05	5.28E-10	7.54E-03	7.00E-08
XE-133	5.18E+06	5.79E-09	1.16E-02	5.00E-07
F&AG	5.98E+06	6.69E-09	2.08E-02	
I-131	2.73E+01	3.06E-14	1.53E-04	2.00E-10
I-132	8.38E+01	9.37E-14	4.68E-06	2.00E-08
I-133	5.40E+01	6.04E-14	6.04E-05	1.00E-09
Iodine	1.65E+02	1.85E-13	2.18E-04	
BR-82	1.29E+01	1.44E-14	2.89E-06	5.00E-09
Other	1.29E+01	1.44E-14	2.89E-06	
H-3	8.75E+07	9.78E-08	9.78E-01	1.00E-07
H-3	8.75E+07	9.78E-08	9.78E-01	
CO-58	7.20E+00	8.06E-15	8.06E-06	1.00E-09
AG-110M	9.99E-01	1.12E-15	1.12E-05	1.00E-10
ND-147	4.33E-01	4.84E-16	4.84E-07	1.00E-09
P>=8	8.64E+00	9.66E-15	1.97E-05	

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
 (Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 2

=== NUCLIDE DATA =====

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
-----	-----	-----	-----	-----
Total	9.35E+07	1.05E-07	9.99E-01	

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 2
 Receptor.....: 5 Composite Crit. Receptor - IP
 Distance (meters)....: 0.0
 Compass Point.....: 0.0

=== PERIOD DOSE BY AGEGROUP, PATHWAY, ORGAN (mrem) ===

Age/Path	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
AGPD	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	0.00E+00	3.59E-06
AINHL	4.66E-08	2.31E-03	2.33E-03	2.31E-03	2.31E-03	2.31E-03	0.00E+00	2.31E-03
AVEG	1.21E-06	4.15E-03	4.70E-03	4.15E-03	4.15E-03	4.15E-03	0.00E+00	4.15E-03
AGMILK	5.19E-06	2.87E-03	5.26E-03	2.87E-03	2.86E-03	2.86E-03	0.00E+00	2.86E-03
ACMEAT	1.56E-07	5.97E-04	6.68E-04	5.97E-04	5.97E-04	5.99E-04	0.00E+00	5.97E-04
ACMILK	4.35E-06	1.41E-03	3.40E-03	1.41E-03	1.40E-03	1.41E-03	0.00E+00	1.40E-03
TGPD	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	0.00E+00	3.59E-06
TINHL	6.54E-08	2.33E-03	2.35E-03	2.33E-03	2.33E-03	2.33E-03	0.00E+00	2.33E-03
TVEG	1.16E-06	4.75E-03	5.21E-03	4.75E-03	4.75E-03	4.75E-03	0.00E+00	4.75E-03
TGMILK	9.42E-06	3.73E-03	7.52E-03	3.74E-03	3.72E-03	3.72E-03	0.00E+00	3.73E-03
TCMEAT	1.30E-07	3.56E-04	4.07E-04	3.56E-04	3.55E-04	3.57E-04	0.00E+00	3.56E-04
TCMILK	7.89E-06	1.83E-03	4.99E-03	1.84E-03	1.82E-03	1.84E-03	0.00E+00	1.83E-03
CGPD	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	0.00E+00	3.59E-06
CINHL	8.86E-08	2.06E-03	2.09E-03	2.06E-03	2.06E-03	2.06E-03	0.00E+00	2.06E-03
CVEG	2.15E-06	7.38E-03	8.07E-03	7.38E-03	7.37E-03	7.38E-03	0.00E+00	7.37E-03
CGMILK	2.28E-05	5.91E-03	1.34E-02	5.93E-03	5.89E-03	5.90E-03	0.00E+00	5.90E-03
CCMEAT	2.40E-07	4.31E-04	5.09E-04	4.31E-04	4.31E-04	4.32E-04	0.00E+00	4.31E-04
CCMILK	1.91E-05	2.91E-03	9.17E-03	2.92E-03	2.89E-03	2.90E-03	0.00E+00	2.90E-03
IGPD	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	3.59E-06	0.00E+00	3.59E-06
IINHL	7.02E-08	1.19E-03	1.21E-03	1.19E-03	1.19E-03	1.19E-03	0.00E+00	1.19E-03
IGMILK	4.77E-05	9.00E-03	2.72E-02	9.01E-03	8.94E-03	8.94E-03	0.00E+00	8.97E-03
ICMILK	3.99E-05	4.43E-03	1.96E-02	4.44E-03	4.38E-03	4.39E-03	0.00E+00	4.40E-03

=== PERIOD DOSE BY AGEGROUP, ORGAN (mrem) ===

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	1.45E-05	1.13E-02	1.64E-02	1.13E-02	1.13E-02	1.13E-02	0.00E+00	1.13E-02
TEEN	2.23E-05	1.30E-02	2.05E-02	1.30E-02	1.30E-02	1.30E-02	0.00E+00	1.30E-02
CHILD	4.81E-05	1.87E-02	3.33E-02	1.87E-02	1.86E-02	1.87E-02	0.00E+00	1.87E-02
INFANT	9.13E-05	1.46E-02	4.81E-02	1.46E-02	1.45E-02	1.45E-02	0.00E+00	1.46E-02

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 2
 Receptor.....: 5 Composite Crit. Receptor - IP
 Distance (meters)....: 0.0
 Compass Point.....: 0.0

=== MAXIMUM PERIOD DOSE TO LIMIT (Any Organ) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	INFANT	THYROID	4.81E-02	31-day	2.25E-01	2.14E+01	3.00E-01	1.60E+01
Qrtr->End	INFANT	THYROID	4.81E-02	Quarter	5.63E+00	8.55E-01	7.50E+00	6.41E-01
Year->End	INFANT	THYROID	4.81E-02	Annual	1.13E+01	4.28E-01	1.50E+01	3.21E-01

Critical Pathway.....: 3 Grs/Goat/Milk (GMILK)
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	3.01E+01
CO-58	2.97E-03
AG-110M	3.74E-03
I-131	6.86E+01
I-132	1.20E-03
I-133	1.25E+00
ND-147	3.97E-06

=== MAXIMUM PERIOD DOSE TO LIMIT (Tot Body) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	CHILD	TBODY	1.87E-02	31-day	1.50E-01	1.24E+01	2.00E-01	9.34E+00
Qrtr->End	CHILD	TBODY	1.87E-02	Quarter	5.25E+00	3.56E-01	7.50E+00	2.49E-01
Year->End	CHILD	TBODY	1.87E-02	Annual	1.05E+01	1.78E-01	1.50E+01	1.24E-01

Critical Pathway.....: 2 Vegetation (VEG)
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	9.96E+01
CO-58	1.34E-02
AG-110M	1.00E-02
I-131	1.33E-01
I-132	3.22E-04
I-133	3.37E-03
ND-147	1.03E-05

GASEOUS RELEASE AND DOSE SUMMARY REPORT - BY UNIT
(Composite Critical Receptor - Limited Analysis)

Release ID.....: 1 All Gas Release Types
 Period Start Date....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (min): 5.256E+05
 Coefficient Type.....: Historical
 Unit.....: 2
 Receptor.....: 4 Composite Crit. Receptor - NG
 Distance (meters)....: 0.0
 Compass Point.....: 0.0

=== MAXIMUM PERIOD NG DOSE TO LIMIT (Gamma) ===

Dose Period	Dose Type	Dose (mrad)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	Gamma	6.49E-05	31-day	1.50E-01	4.33E-02	2.00E-01	3.24E-02
Qrtr->End	Gamma	6.49E-05	Quarter	3.75E+00	1.73E-03	5.00E+00	1.30E-03
Year->End	Gamma	6.49E-05	Annual	7.50E+00	8.65E-04	1.00E+01	6.49E-04

Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

AR-41	2.13E+00
KR-85M	2.29E-01
KR-85	1.32E-01
XE-133M	9.61E-01
KR-88	1.37E+00
XE-131M	2.58E-02
XE-135	3.15E+01
XE-133	6.36E+01

=== MAXIMUM PERIOD NG DOSE TO LIMIT (Beta) ===

Dose Period	Dose Type	Dose (mrad)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	Beta	2.65E-04	31-day	3.00E-01	8.84E-02	4.00E-01	6.63E-02
Qrtr->End	Beta	2.65E-04	Quarter	7.50E+00	3.53E-03	1.00E+01	2.65E-03
Year->End	Beta	2.65E-04	Annual	1.50E+01	1.77E-03	2.00E+01	1.33E-03

Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

AR-41	3.00E-01
KR-85M	1.46E-01
KR-85	5.99E+00
XE-133M	1.74E+00
KR-88	1.06E-01
XE-131M	7.33E-02
XE-135	1.61E+01
XE-133	7.55E+01

LIQUID RELEASE AND DOSE SUMMARY REPORT
 ----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
 Period Start Date.....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (mins): 5.256E+05
 Unit.....: 1

=== MULTIPLE RELEASE POINT MESSAGE =====
 Undiluted and Diluted Flowrate(s) and Concentration(s) cannot be combined.

=== RELEASE DATA =====
 Total Release Duration (minutes)..... 1.486E+06
 Total Undiluted Volume Released (gallons)..... NA
 Average Undiluted Flowrate (gpm)..... NA

Total Dilution Volume (gallons)..... NA
 Average Dilution Flowrate (gpm)..... NA

=== NUCLIDE DATA =====

Nuclide	uCi
CO-57	6.07E+02
NB-97	2.82E+01
SN-113	5.65E+00
SB-125	3.06E+03
TE-123M	1.10E+02
CR-51	3.25E+02
MN-54	1.19E+03
FE-59	2.71E+02
CO-58	1.10E+05
CO-60	1.09E+04
ZR-95	6.18E+01
NB-95	2.27E+02
AG-110M	3.39E+01
TE-125M	3.80E+02
TE-132	3.83E+01
I-132	4.16E+01
CS-134	9.35E+02
CS-137	1.07E+03
BA-139	1.73E+01
Gamma	1.29E+05
KR-88	7.15E+00
D&EG	7.15E+00
H-3	5.29E+08
FE-55	6.82E+03

LIQUID RELEASE AND DOSE SUMMARY REPORT
----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
Period Start Date.....: 01/01/2009 00:00
Period End Date.....: 01/01/2010 00:00
Period Duration (mins): 5.256E+05

```

=== NUCLIDE DATA =====
Nuclide      uCi
-----
Beta         5.29E+08
ALPHA        1.71E+02
-----
Alpha        1.71E+02
-----
Total        5.29E+08

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LIQUID RELEASE AND DOSE SUMMARY REPORT
 ----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
 Period Start Date.....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (mins): 5.256E+05
 Unit.....: 1
 Receptor.....: 0 Liquid Receptor

=== PERIOD DOSE BY AGEGROUP, PATHWAY, ORGAN (mrem) ===

Age/Path	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
APWtr	2.28E-05	1.90E-02	1.90E-02	1.90E-02	1.90E-02	1.93E-02	0.00E+00	1.90E-02
AFWFSp	1.65E-02	3.74E-02	7.88E-03	1.76E-02	1.11E-02	2.31E-02	0.00E+00	3.01E-02
TPWtr	2.20E-05	1.34E-02	1.34E-02	1.34E-02	1.34E-02	1.35E-02	0.00E+00	1.34E-02
TFWFSp	1.74E-02	3.63E-02	6.05E-03	1.58E-02	9.90E-03	1.67E-02	0.00E+00	1.90E-02
CPWtr	6.40E-05	2.58E-02	2.57E-02	2.57E-02	2.57E-02	2.58E-02	0.00E+00	2.58E-02
CFWFSp	2.15E-02	3.14E-02	5.02E-03	1.33E-02	8.05E-03	8.75E-03	0.00E+00	1.05E-02
IPWtr	6.29E-05	2.53E-02	2.52E-02	2.52E-02	2.52E-02	2.53E-02	0.00E+00	2.53E-02

=== PERIOD DOSE BY AGEGROUP, ORGAN (mrem) ===

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	1.65E-02	5.64E-02	2.69E-02	3.66E-02	3.01E-02	4.24E-02	0.00E+00	4.91E-02
TEEN	1.74E-02	4.98E-02	1.94E-02	2.92E-02	2.33E-02	3.02E-02	0.00E+00	3.24E-02
CHILD	2.16E-02	5.72E-02	3.07E-02	3.90E-02	3.38E-02	3.46E-02	0.00E+00	3.62E-02
INFANT	6.29E-05	2.53E-02	2.52E-02	2.52E-02	2.52E-02	2.53E-02	0.00E+00	2.53E-02

LIQUID RELEASE AND DOSE SUMMARY REPORT
 ----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
 Period Start Date.....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (mins): 5.256E+05
 Unit.....: 1
 Receptor.....: 0 Liquid Receptor

=== MAXIMUM PERIOD DOSE TO LIMIT (Any Organ) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	CHILD	LIVER	5.72E-02	31-day	1.50E-01	3.81E+01	2.00E-01	2.86E+01
Qrtr->End	CHILD	LIVER	5.72E-02	Quarter	3.75E+00	1.52E+00	5.00E+00	1.14E+00
Year->End	CHILD	LIVER	5.72E-02	Annual	7.50E+00	7.62E-01	1.00E+01	5.72E-01

Critical Pathway.....: 1 Fresh Water Fish - Sport (FFSP)
 Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
H-3	5.37E+01
CR-51	0.00E+00
MN-54	1.68E-01
FE-55	3.01E-01
FE-59	2.47E-02
CO-58	3.52E-01
CO-60	1.03E-01
ZR-95	4.06E-07
NB-95	1.94E-03
AG-110M	2.78E-06
TE-125M	1.55E-02
TE-132	2.26E-03
I-132	3.90E-05
CS-134	2.34E+01
CS-137	2.19E+01
BA-139	1.08E-09

=== MAXIMUM PERIOD DOSE TO LIMIT (Tot Body) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	ADULT	TBODY	4.91E-02	31-day	4.50E-02	1.09E+02	6.00E-02	8.19E+01
Qrtr->End	ADULT	TBODY	4.91E-02	Quarter	1.13E+00	4.37E+00	1.50E+00	3.28E+00
Year->End	ADULT	TBODY	4.91E-02	Annual	2.25E+00	2.18E+00	3.00E+00	1.64E+00

Critical Pathway.....: 1 Fresh Water Fish - Sport (FFSP)
 Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
H-3	5.48E+01
CR-51	2.02E-05

LIQUID RELEASE AND DOSE SUMMARY REPORT
 ----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
 Period Start Date.....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (mins): 5.256E+05

Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
MN-54	4.80E-02
FE-55	7.55E-02
FE-59	1.25E-02
CO-58	1.11E+00
CO-60	3.09E-01
ZR-95	2.59E-07
NB-95	1.46E-03
AG-110M	1.53E-06
TE-125M	6.33E-03
TE-132	2.73E-03
I-132	1.56E-05
CS-134	2.61E+01
CS-137	1.77E+01
BA-139	3.50E-08

LIQUID RELEASE AND DOSE SUMMARY REPORT
----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
Period Start Date.....: 01/01/2009 00:00
Period End Date.....: 01/01/2010 00:00
Period Duration (mins): 5.256E+05
Unit.....: 2

=== MULTIPLE RELEASE POINT MESSAGE =====
Undiluted and Diluted Flowrate(s) and Concentration(s) cannot be combined.

=== RELEASE DATA =====
Total Release Duration (minutes)..... 1.486E+06
Total Undiluted Volume Released (gallons)..... NA
Average Undiluted Flowrate (gpm)..... NA

Total Dilution Volume (gallons)..... NA
Average Dilution Flowrate (gpm)..... NA

=== NUCLIDE DATA =====

Table with 2 columns: Nuclide, uCi. Rows include CO-57, NB-97, SN-113, SB-125, TE-123M, CR-51, MN-54, FE-59, CO-58, CO-60, ZR-95, NB-95, AG-110M, TE-125M, TE-132, I-132, CS-134, CS-137, BA-139, Gamma, KR-88, D&EG, H-3, FE-55.

LIQUID RELEASE AND DOSE SUMMARY REPORT
----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
Period Start Date.....: 01/01/2009 00:00
Period End Date.....: 01/01/2010 00:00
Period Duration (mins): 5.256E+05

=== NUCLIDE DATA =====

Nuclide	uCi
-----	-----
Beta	5.29E+08
ALPHA	1.71E+02
-----	-----
Alpha	1.71E+02
-----	-----
Total	5.29E+08

LIQUID RELEASE AND DOSE SUMMARY REPORT
 ----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
 Period Start Date.....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (mins): 5.256E+05
 Unit.....: 2
 Receptor.....: 0 Liquid Receptor

=== PERIOD DOSE BY AGEGROUP, PATHWAY, ORGAN (mrem) ===

Age/Path	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
APWtr	2.28E-05	1.90E-02	1.90E-02	1.90E-02	1.90E-02	1.93E-02	0.00E+00	1.90E-02
AFWFSp	1.65E-02	3.74E-02	7.88E-03	1.76E-02	1.11E-02	2.31E-02	0.00E+00	3.01E-02
TPWtr	2.20E-05	1.34E-02	1.34E-02	1.34E-02	1.34E-02	1.35E-02	0.00E+00	1.34E-02
TFWFSp	1.74E-02	3.63E-02	6.05E-03	1.58E-02	9.90E-03	1.67E-02	0.00E+00	1.90E-02
CPWtr	6.40E-05	2.58E-02	2.57E-02	2.57E-02	2.57E-02	2.58E-02	0.00E+00	2.58E-02
CFWFSp	2.15E-02	3.14E-02	5.02E-03	1.33E-02	8.05E-03	8.75E-03	0.00E+00	1.05E-02
IPWtr	6.29E-05	2.53E-02	2.52E-02	2.52E-02	2.52E-02	2.53E-02	0.00E+00	2.53E-02

=== PERIOD DOSE BY AGEGROUP, ORGAN (mrem) ===

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	1.65E-02	5.64E-02	2.69E-02	3.66E-02	3.01E-02	4.24E-02	0.00E+00	4.91E-02
TEEN	1.74E-02	4.98E-02	1.94E-02	2.92E-02	2.33E-02	3.02E-02	0.00E+00	3.24E-02
CHILD	2.16E-02	5.72E-02	3.07E-02	3.90E-02	3.38E-02	3.46E-02	0.00E+00	3.62E-02
INFANT	6.29E-05	2.53E-02	2.52E-02	2.52E-02	2.52E-02	2.53E-02	0.00E+00	2.53E-02

LIQUID RELEASE AND DOSE SUMMARY REPORT
 ----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
 Period Start Date.....: 01/01/2009 00:00
 Period End Date.....: 01/01/2010 00:00
 Period Duration (mins): 5.256E+05
 Unit.....: 2
 Receptor.....: 0 Liquid Receptor

=== MAXIMUM PERIOD DOSE TO LIMIT (Any Organ) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	CHILD	LIVER	5.72E-02	31-day	1.50E-01	3.81E+01	2.00E-01	2.86E+01
Qrtr->End	CHILD	LIVER	5.72E-02	Quarter	3.75E+00	1.52E+00	5.00E+00	1.14E+00
Year->End	CHILD	LIVER	5.72E-02	Annual	7.50E+00	7.62E-01	1.00E+01	5.72E-01

Critical Pathway.....: 1 Fresh Water Fish - Sport (FFSP)
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	5.37E+01
CR-51	0.00E+00
MN-54	1.68E-01
FE-55	3.01E-01
FE-59	2.47E-02
CO-58	3.52E-01
CO-60	1.03E-01
ZR-95	4.06E-07
NB-95	1.94E-03
AG-110M	2.78E-06
TE-125M	1.55E-02
TE-132	2.26E-03
I-132	3.90E-05
CS-134	2.34E+01
CS-137	2.19E+01
BA-139	1.08E-09

=== MAXIMUM PERIOD DOSE TO LIMIT (Tot Body) ===

Dose Period	Age Group	Organ	Dose (mrem)	Limit Period	Admin Limit	Admin % of Limit	T.Spec Limit	T.Spec % of Limit
Strt->End	ADULT	TBODY	4.91E-02	31-day	4.50E-02	1.09E+02	6.00E-02	8.19E+01
Qrtr->End	ADULT	TBODY	4.91E-02	Quarter	1.13E+00	4.37E+00	1.50E+00	3.28E+00
Year->End	ADULT	TBODY	4.91E-02	Annual	2.25E+00	2.18E+00	3.00E+00	1.64E+00

Critical Pathway.....: 1 Fresh Water Fish - Sport (FFSP)
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	5.48E+01
CR-51	2.02E-05

LIQUID RELEASE AND DOSE SUMMARY REPORT
----- (PERIOD BASIS - BY UNIT) -----

Release ID.....: 1 All Liquid Release Types
Period Start Date.....: 01/01/2009 00:00
Period End Date.....: 01/01/2010 00:00
Period Duration (mins): 5.256E+05

Major Contributors.....: 0.0 % or greater to total

Nuclide	Percentage
MN-54	4.80E-02
FE-55	7.55E-02
FE-59	1.25E-02
CO-58	1.11E+00
CO-60	3.09E-01
ZR-95	2.59E-07
NB-95	1.46E-03
AG-110M	1.53E-06
TE-125M	6.33E-03
TE-132	2.73E-03
I-132	1.56E-05
CS-134	2.61E+01
CS-137	1.77E+01
BA-139	3.50E-08

BRAIDWOOD NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2009
UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)

ATTACHMENT 1

Tables 7-11
Wind Direction and Stability Classes

Braidwood Generating Station

Period of Record: January - March 2009

Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	1	0	0	2
NNE	0	1	7	5	0	0	13
NE	0	1	2	0	0	0	3
ENE	0	1	0	0	0	0	1
E	0	5	0	0	0	0	5
ESE	0	5	1	0	0	0	6
SE	0	1	2	0	0	0	3
SSE	0	1	6	0	0	0	7
S	0	0	2	2	1	0	5
SSW	0	0	3	3	3	0	9
SW	0	1	0	3	0	0	4
WSW	0	0	1	1	0	0	2
W	0	1	2	5	0	0	8
WNW	0	11	26	5	0	0	42
NW	0	8	16	1	0	0	25
NNW	0	1	9	4	0	0	14
Variable	0	0	0	0	0	0	0
Total	0	37	78	30	4	0	149

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	0	0	0	3
NNE	0	0	7	0	0	0	7
NE	0	1	1	0	0	0	2
ENE	0	2	0	0	0	0	2
E	2	6	0	0	0	0	8
ESE	0	1	0	3	0	0	4
SE	0	5	3	1	0	0	9
SSE	0	3	4	1	0	0	8
S	0	1	3	5	0	0	9
SSW	0	2	0	1	0	0	3
SW	0	0	1	4	0	0	5
WSW	0	3	3	2	0	0	8
W	0	3	6	1	3	0	13
WNW	0	4	6	2	0	0	12
NW	0	3	4	0	0	0	7
NNW	0	1	4	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	2	35	45	20	3	0	105

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	3	1	0	0	5
NNE	0	0	2	0	0	0	2
NE	0	0	3	0	0	0	3
ENE	0	2	0	0	0	0	2
E	1	1	1	0	0	0	3
ESE	0	5	0	0	0	0	5
SE	0	3	4	0	0	0	7
SSE	0	1	3	1	0	0	5
S	0	3	3	8	0	0	14
SSW	0	3	1	5	1	0	10
SW	0	5	1	3	1	0	10
WSW	0	7	2	2	0	0	11
W	0	5	1	2	2	0	10
WNW	0	8	2	1	0	0	11
NW	0	1	3	1	0	0	5
NNW	0	3	2	1	0	0	6
Variable	0	0	0	0	0	0	0
Total	1	48	31	25	4	0	109

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	14	23	2	0	0	39
NNE	1	17	21	11	0	0	50
NE	2	18	41	11	0	0	72
ENE	3	31	7	0	0	0	41
E	4	17	7	0	0	0	28
ESE	0	16	18	8	0	0	42
SE	2	13	10	12	0	0	37
SSE	0	18	29	9	2	0	58
S	0	6	27	24	4	0	61
SSW	0	10	10	17	4	0	41
SW	0	10	20	12	1	0	43
WSW	1	14	10	3	1	0	29
W	2	26	25	18	6	0	77
WNW	11	28	73	16	1	0	129
NW	9	19	37	8	0	0	73
NNW	1	28	36	17	1	0	83
Variable	1	1	0	0	0	0	2
Total	37	286	394	168	20	0	905

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	6	6	3	0	0	0	15
NNE	8	7	0	0	0	0	15
NE	8	5	1	1	0	0	15
ENE	12	10	0	0	0	0	22
E	9	22	1	0	0	0	32
ESE	4	39	9	1	0	0	53
SE	1	21	18	5	0	0	45
SSE	2	25	34	4	1	0	66
S	1	5	31	16	1	0	54
SSW	0	1	16	15	4	0	36
SW	2	10	25	6	0	0	43
WSW	6	30	12	0	0	0	48
W	14	30	11	3	1	0	59
WNW	25	47	14	0	0	0	86
NW	28	37	5	0	0	0	70
NNW	5	25	6	0	0	0	36
Variable	0	0	0	0	0	0	0
Total	131	320	186	51	7	0	695

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	4	0	0	0	0	0	4
NNE	1	1	0	0	0	0	2
NE	0	0	0	0	0	0	0
ENE	8	0	0	0	0	0	8
E	11	1	0	0	0	0	12
ESE	7	1	0	0	0	0	8
SE	1	7	0	0	0	0	8
SSE	1	0	0	0	0	0	1
S	2	1	0	0	0	0	3
SSW	1	7	2	0	0	0	10
SW	0	4	1	0	0	0	5
WSW	3	28	1	0	0	0	32
W	14	17	1	0	0	0	32
WNW	9	3	0	0	0	0	12
NW	7	3	0	0	0	0	10
NNW	4	1	0	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	73	74	5	0	0	0	152

Hours of calm in this stability class: 4

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	3	0	0	0	0	0	3
ENE	7	0	0	0	0	0	7
E	6	0	0	0	0	0	6
ESE	1	0	0	0	0	0	1
SE	1	2	0	0	0	0	3
SSE	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	1	0	0	0	0	1
WSW	2	2	0	0	0	0	4
W	3	1	0	0	0	0	4
WNW	0	0	0	0	0	0	0
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	25	6	0	0	0	0	31

Hours of calm in this stability class: 5

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	1	0	0	3
NNE	0	0	2	4	3	0	9
NE	0	0	3	3	0	0	6
ENE	0	1	0	0	0	0	1
E	0	2	2	0	0	0	4
ESE	0	2	4	1	0	0	7
SE	0	0	4	0	0	0	4
SSE	0	0	1	3	1	0	5
S	0	0	0	4	0	3	7
SSW	0	0	3	0	4	2	9
SW	0	1	0	0	1	1	3
WSW	0	0	2	0	1	0	3
W	0	0	0	1	3	0	4
WNW	0	0	15	16	7	0	38
NW	0	0	21	12	5	0	38
NNW	0	1	2	2	2	1	8
Variable	0	0	0	0	0	0	0
Total	0	7	61	47	27	7	149

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	1	0	0	3
NNE	0	0	1	6	0	0	7
NE	0	0	1	1	0	0	2
ENE	0	1	1	0	0	0	2
E	0	6	0	0	0	0	6
ESE	0	3	1	0	2	2	8
SE	0	3	3	1	1	0	8
SSE	0	2	1	4	0	0	7
S	0	0	2	1	5	1	9
SSW	0	1	1	0	2	0	4
SW	0	0	0	1	1	1	3
WSW	0	2	2	2	3	0	9
W	0	1	5	0	1	3	10
WNW	0	0	7	5	2	0	14
NW	0	2	2	2	1	0	7
NNW	0	0	5	1	0	0	6
Variable	0	0	0	0	0	0	0
Total	0	21	34	25	18	7	105

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	2	3	0	0	6
NNE	0	0	0	1	0	0	1
NE	0	0	1	2	0	0	3
ENE	0	1	1	0	0	0	2
E	0	2	1	1	0	0	4
ESE	0	2	2	0	0	0	4
SE	0	1	4	1	1	0	7
SSE	0	0	2	3	0	1	6
S	0	2	3	1	9	0	15
SSW	0	2	0	2	2	4	10
SW	0	5	0	2	0	1	8
WSW	0	6	3	2	2	0	13
W	0	2	3	1	1	2	9
WNW	0	3	3	2	1	0	9
NW	0	0	1	2	3	0	6
NNW	0	3	0	2	0	1	6
Variable	0	0	0	0	0	0	0
Total	0	30	26	25	19	9	109

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	19	16	2	0	38
NNE	0	4	13	13	6	5	41
NE	0	11	12	40	8	5	76
ENE	1	10	18	12	0	0	41
E	1	6	11	8	2	0	28
ESE	0	2	12	10	12	9	45
SE	0	7	6	9	7	11	40
SSE	0	2	25	14	7	10	58
S	0	0	7	21	24	9	61
SSW	0	4	9	10	21	8	52
SW	1	8	5	8	5	5	32
WSW	0	7	6	9	3	1	26
W	2	7	11	12	8	13	53
WNW	1	10	23	49	33	13	129
NW	2	16	14	41	28	2	103
NNW	0	10	32	20	14	4	80
Variable	1	1	0	0	0	0	2
Total	9	106	223	292	180	95	905

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	6	13	2	0	0	21
NNE	1	2	7	0	0	0	10
NE	0	2	7	3	0	1	13
ENE	0	7	14	0	0	0	21
E	0	3	9	9	2	0	23
ESE	0	0	24	19	4	6	53
SE	0	2	20	15	8	1	46
SSE	0	1	20	27	12	2	62
S	0	1	12	32	17	7	69
SSW	2	0	3	7	23	16	51
SW	0	3	8	10	5	2	28
WSW	0	4	9	20	4	0	37
W	0	10	11	20	5	1	47
WNW	0	8	25	44	5	0	82
NW	1	7	51	19	1	0	79
NNW	0	4	34	18	0	0	56
Variable	0	0	0	0	0	0	0
Total	4	60	267	245	86	36	698

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	5	1	0	0	8
NNE	0	3	1	0	0	0	4
NE	1	2	0	0	0	0	3
ENE	0	1	0	0	0	0	1
E	0	2	4	1	0	0	7
ESE	0	3	3	6	0	0	12
SE	0	1	4	0	0	0	5
SSE	0	2	6	0	0	0	8
S	0	0	3	0	0	0	3
SSW	1	1	2	3	1	0	8
SW	0	0	5	2	0	0	7
WSW	1	1	1	5	0	0	8
W	0	2	11	20	0	0	33
WNW	1	4	15	10	0	0	30
NW	1	2	7	2	0	0	12
NNW	0	2	3	2	0	0	7
Variable	0	0	0	0	0	0	0
Total	5	28	70	52	1	0	156

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: 2

Braidwood Generating Station

Period of Record: January - March 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	1	1	0	0	0	0	2
E	0	1	2	0	0	0	3
ESE	1	0	4	0	0	0	5
SE	1	4	0	0	0	0	5
SSE	0	1	3	0	0	0	4
S	0	1	1	0	0	0	2
SSW	1	1	0	0	0	0	2
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	1	0	0	3	0	0	4
WNW	0	1	4	0	0	0	5
NW	2	1	1	0	0	0	4
NNW	0	0	0	0	0	0	0
Variable	0	0	0	0	0	0	0
Total	7	11	15	3	0	0	36

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: 2

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	6	0	0	0	0	6
NNE	1	12	16	0	0	0	29
NE	0	17	15	0	0	0	32
ENE	0	12	1	0	0	0	13
E	0	8	3	0	0	0	11
ESE	0	4	2	0	0	0	6
SE	1	6	3	4	0	0	14
SSE	0	3	8	0	0	0	11
S	0	1	7	0	0	0	8
SSW	0	0	0	15	1	0	16
SW	0	1	4	2	0	0	7
WSW	1	6	8	6	0	0	21
W	0	17	12	4	0	0	33
WNW	1	16	19	13	0	0	49
NW	0	16	9	5	0	0	30
NNW	0	8	1	1	0	0	10
Variable	1	1	0	0	0	0	2
Total	5	134	108	50	1	0	298

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009

Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	0	0	0	0	2
NNE	0	4	6	1	0	0	11
NE	3	3	6	0	0	0	12
ENE	1	3	1	0	0	0	5
E	0	5	0	0	0	0	5
ESE	0	2	0	0	0	0	2
SE	1	7	1	0	0	0	9
SSE	2	5	2	1	0	0	10
S	0	0	1	1	0	0	2
SSW	1	1	1	1	0	0	4
SW	1	4	2	4	0	0	11
WSW	0	0	3	1	0	0	4
W	2	7	3	2	0	0	14
WNW	1	2	4	1	0	0	8
NW	1	5	5	0	0	0	11
NNW	1	3	3	1	0	0	8
Variable	2	0	0	0	0	0	2
Total	16	53	38	13	0	0	120

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	2	0	0	0	4
NNE	2	5	3	1	0	0	11
NE	0	5	6	0	0	0	11
ENE	3	0	3	0	0	0	6
E	1	6	1	0	0	0	8
ESE	1	1	1	0	0	0	3
SE	2	2	1	0	0	0	5
SSE	0	6	1	0	0	0	7
S	0	0	1	0	0	0	1
SSW	0	1	1	5	1	0	8
SW	1	2	1	1	0	0	5
WSW	1	2	3	1	1	0	8
W	1	3	5	1	0	0	10
WNW	1	4	4	1	0	0	10
NW	1	7	1	0	0	0	9
NNW	0	3	0	1	0	0	4
Variable	1	0	0	0	0	0	1
Total	15	49	34	11	2	0	111

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	7	15	8	0	0	32
NNE	3	48	32	13	0	0	96
NE	8	53	38	4	0	0	103
ENE	7	30	29	0	0	0	66
E	8	24	6	0	0	0	38
ESE	4	25	5	0	0	0	34
SE	2	13	10	2	0	0	27
SSE	1	12	8	1	0	0	22
S	2	9	15	5	2	0	33
SSW	1	5	13	10	7	0	36
SW	2	7	13	12	1	0	35
WSW	2	6	3	3	0	0	14
W	6	14	18	6	1	0	45
WNW	7	34	17	4	0	0	62
NW	3	24	22	0	0	0	49
NNW	0	7	22	4	0	0	33
Variable	1	0	0	0	0	0	1
Total	59	318	266	72	11	0	726

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

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	6	8	1	0	0	0	15
NNE	6	27	4	1	0	0	38
NE	15	18	1	0	0	0	34
ENE	27	29	1	0	0	0	57
E	24	17	0	0	0	0	41
ESE	8	27	1	0	0	0	36
SE	7	17	11	0	0	0	35
SSE	5	35	9	1	0	0	50
S	3	29	40	12	0	0	84
SSW	3	11	24	11	1	0	50
SW	3	18	10	2	0	0	33
WSW	5	39	3	3	0	0	50
W	16	30	10	0	0	0	56
WNW	13	20	1	0	0	0	34
NW	6	15	4	0	0	0	25
NNW	3	15	4	0	0	0	22
Variable	1	0	0	0	0	0	1
Total	151	355	124	30	1	0	661

Hours of calm in this stability class: 4

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009

Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)

Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	1	0	0	0	0	3
NNE	4	0	0	0	0	0	4
NE	9	1	0	0	0	0	10
ENE	15	1	0	0	0	0	16
E	13	1	0	0	0	0	14
ESE	6	2	0	0	0	0	8
SE	6	3	0	0	0	0	9
SSE	3	2	0	0	0	0	5
S	2	0	0	0	0	0	2
SSW	1	0	0	0	0	0	1
SW	5	3	0	0	0	0	8
WSW	11	19	0	0	0	0	30
W	19	9	0	0	0	0	28
WNW	14	1	0	0	0	0	15
NW	6	0	0	0	0	0	6
NNW	2	1	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	118	44	0	0	0	0	162

Hours of calm in this stability class: 15

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	1	0	0	0	0	0	1
NE	3	0	0	0	0	0	3
ENE	7	0	0	0	0	0	7
E	8	0	0	0	0	0	8
ESE	5	4	0	0	0	0	9
SE	2	0	0	0	0	0	2
SSE	1	0	0	0	0	0	1
S	0	0	0	0	0	0	0
SSW	1	0	0	0	0	0	1
SW	4	0	0	0	0	0	4
WSW	4	5	0	0	0	0	9
W	11	2	0	0	0	0	13
WNW	5	0	0	0	0	0	5
NW	5	0	0	0	0	0	5
NNW	1	0	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	58	11	0	0	0	0	69

Hours of calm in this stability class: 16

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	8	1	0	0	0	9
NNE	0	3	10	7	0	0	20
NE	0	7	19	10	0	0	36
ENE	0	4	6	1	0	0	11
E	1	2	9	3	0	0	15
ESE	0	2	4	1	0	0	7
SE	1	5	2	1	6	0	15
SSE	0	1	4	6	0	0	11
S	0	0	1	6	0	0	7
	0	1	0	3	13	2	19
	0	0	0	4	0	0	4
W		3	2	5	7	0	17
W		4	18	12	1	0	35
WNW	1	3	16	10	22	1	53
NW	0	3	14	4	11	0	32
NNW	0	5	0	1	0	0	6
Variable	1	0	0	0	0	0	1
Total	4	51	106	74	60	3	298

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

Braidwood Generating Station

Period of Record: April - June 2009

Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)

Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	0	0	0	0	2
NNE	1	3	1	2	0	1	8
NE	2	2	1	10	0	0	15
ENE	1	4	0	1	0	0	6
E	0	3	1	1	0	0	5
ESE	0	3	1	0	0	0	4
SE	0	4	1	1	0	0	6
SSE	0	2	4	2	0	1	9
S	1	0	0	0	0	1	2
SSW	1	4	0	1	1	0	7
SW	1	2	1	1	4	0	9
WSW	0	1	1	1	1	0	4
W	0	6	1	5	0	1	13
WNW	0	1	2	4	1	0	8
NW	1	0	5	5	2	0	13
NNW	0	4	1	1	1	0	7
Variable	1	0	0	0	0	0	1
Total	9	41	20	35	10	4	119

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: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	2	1	0	0	5
NNE	0	4	1	2	1	0	8
NE	0	3	3	6	0	0	12
ENE	2	0	0	2	0	0	4
E	1	3	4	2	0	0	10
ESE	1	0	1	0	0	0	2
SE	1	2	1	1	1	0	6
SSE	0	6	0	1	0	0	7
S	0	1	1	0	0	0	2
SSW	0	1	1	0	6	2	10
SW	1	2	0	1	0	0	4
WSW	0	1	2	3	1	1	8
W	1	1	1	6	1	0	10
WNW	0	1	2	2	3	0	8
NW	0	2	4	3	1	0	10
NNW	1	2	1	0	0	0	4
Variable	1	0	0	0	0	0	1
Total	9	31	24	30	14	3	111

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	3	7	9	10	1	31
NNE	2	4	37	22	11	1	77
NE	3	14	49	39	11	0	116
ENE	2	2	26	22	3	0	55
E	2	8	25	19	1	0	55
ESE	0	6	4	22	2	0	34
SE	0	10	4	7	4	1	26
SSE	3	7	6	5	4	1	26
S	0	4	5	15	1	6	31
SSW	0	2	4	9	13	10	38
SW	0	4	5	12	7	3	31
WSW	1	0	6	2	3	0	12
W	0	8	13	14	6	1	42
WNW	2	6	30	15	18	1	72
NW	2	7	12	20	3	0	44
NNW	0	3	4	23	4	0	34
Variable	2	0	0	0	0	0	2
Total	20	88	237	255	101	25	726

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: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	8	3	0	0	15
NNE	0	2	20	6	1	0	29
NE	0	8	26	7	0	0	41
ENE	0	17	36	3	0	0	56
E	0	4	22	11	0	0	37
ESE	0	2	16	15	1	2	36
SE	0	6	25	11	5	0	47
SSE	3	3	16	11	4	1	38
S	1	1	19	35	22	7	85
SSW	0	4	10	31	5	12	62
SW	0	9	13	9	1	0	32
WSW	0	7	13	18	4	0	42
W	0	8	19	19	1	0	47
WNW	1	8	15	19	1	0	44
NW	0	1	22	8	1	0	32
NNW	0	1	14	5	0	0	20
Variable	0	0	0	0	0	0	0
Total	5	85	294	211	46	22	663

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: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	2	5	0	0	0	9
NNE	1	1	3	0	0	0	5
NE	1	1	3	1	0	0	6
ENE	0	4	12	0	0	0	16
E	1	2	9	0	0	0	12
ESE	0	1	7	6	0	0	14
SE	1	2	4	2	0	0	9
SSE	0	1	3	2	0	0	6
S	0	5	2	0	0	0	7
SSW	0	5	1	0	0	0	6
SW	0	0	3	0	0	0	3
WSW	0	1	5	3	0	0	9
W	0	4	19	13	0	0	36
WNW	0	4	14	5	0	0	23
NW	1	3	5	0	0	0	9
NNW	1	1	5	0	0	0	7
Variable	0	0	0	0	0	0	0
Total	8	37	100	32	0	0	177

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: April - June 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	1	0	0	0	4
NNE	0	1	1	0	0	0	2
NE	0	1	0	0	0	0	1
ENE	0	0	4	0	0	0	4
E	1	0	5	2	0	0	8
ESE	0	1	2	1	0	0	4
SE	0	4	2	4	0	0	10
SSE	0	0	1	0	0	0	1
S	0	2	2	0	0	0	4
SSW	0	5	1	0	0	0	6
SW	0	2	0	0	0	0	2
WSW	0	1	0	0	0	0	1
W	2	2	7	7	0	0	18
WNW	4	1	3	1	0	0	9
NW	0	3	3	0	0	0	6
NNW	0	4	1	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	8	29	33	15	0	0	85

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	17	2	0	0	0	19
NNE	0	19	2	0	0	0	21
NE	3	42	5	0	0	0	50
ENE	5	33	1	0	0	0	39
E	3	14	0	0	0	0	17
ESE	1	5	1	0	0	0	7
SE	2	7	5	0	0	0	14
SSE	0	11	3	0	0	0	14
S	0	8	2	0	0	0	10
SSW	0	4	19	9	0	0	32
SW	0	10	17	2	0	0	29
WSW	0	14	13	0	0	0	27
W	0	24	18	0	0	0	42
WNW	0	34	10	0	0	0	44
NW	0	43	5	0	0	0	48
NNW	0	20	7	0	0	0	27
Variable	0	0	0	0	0	0	0
Total	14	305	110	11	0	0	440

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	2	0	0	0	5
NNE	1	6	1	0	0	0	8
NE	3	8	1	0	0	0	12
ENE	4	13	0	0	0	0	17
E	4	3	0	0	0	0	7
ESE	0	4	0	0	0	0	4
SE	0	5	2	0	0	0	7
SSE	0	2	0	0	0	0	2
S	0	3	2	0	0	0	5
SSW	0	0	2	0	0	0	2
SW	1	1	4	0	0	0	6
WSW	1	8	5	0	0	0	14
W	0	3	2	2	0	0	7
WNW	1	7	0	0	0	0	8
NW	1	5	3	0	0	0	9
NNW	1	3	1	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	17	74	25	2	0	0	118

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

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

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	6	11	0	0	0	0	17
NNE	5	14	1	0	0	0	20
NE	20	29	6	0	0	0	55
ENE	29	31	0	0	0	0	60
E	19	9	0	0	0	0	28
ESE	7	21	1	0	0	0	29
SE	3	12	5	0	0	0	20
SSE	0	14	7	0	0	0	21
S	1	7	9	0	0	0	17
SSW	1	6	27	5	0	0	39
SW	1	19	22	2	0	0	44
WSW	7	27	10	0	0	0	44
W	9	14	5	8	0	0	36
WNW	10	29	7	0	0	0	46
NW	6	19	8	0	0	0	33
NNW	9	23	3	0	0	0	35
Variable	0	0	0	0	0	0	0
Total	133	285	111	15	0	0	544

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	10	7	1	0	0	0	18
NNE	16	26	0	0	0	0	42
NE	43	8	0	0	0	0	51
ENE	53	11	1	0	0	0	65
E	35	5	0	0	0	0	40
ESE	17	9	0	0	0	0	26
SE	8	37	2	0	0	0	47
SSE	3	16	4	0	0	0	23
S	2	34	9	0	0	0	45
SSW	2	27	22	1	0	0	52
SW	2	14	9	0	0	0	25
WSW	11	21	3	0	0	0	35
W	29	15	0	3	0	0	47
WNW	26	8	3	0	0	0	37
NW	13	15	0	1	0	0	29
NNW	13	11	0	0	0	0	24
Variable	0	0	0	0	0	0	0
Total	283	264	54	5	0	0	606

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	15	1	0	0	0	0	16
NNE	15	0	0	0	0	0	15
NE	24	0	0	0	0	0	24
ENE	30	0	0	0	0	0	30
E	28	0	0	0	0	0	28
ESE	21	4	0	0	0	0	25
SE	2	1	0	0	0	0	3
SSE	6	0	0	0	0	0	6
S	3	0	0	0	0	0	3
SSW	5	3	0	0	0	0	8
SW	3	2	1	0	0	0	6
WSW	11	11	0	0	0	0	22
W	31	1	0	0	0	0	32
WNW	25	0	0	0	0	0	25
NW	13	0	0	0	0	0	13
NNW	12	0	0	0	0	0	12
Variable	0	0	0	0	0	0	0
Total	244	23	1	0	0	0	268

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	8	0	0	0	0	0	8
NNE	14	0	0	0	0	0	14
NE	4	0	0	0	0	0	4
ENE	15	0	0	0	0	0	15
E	8	0	0	0	0	0	8
ESE	6	0	0	0	0	0	6
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	1	0	0	0	0	0	1
WSW	6	0	0	0	0	0	6
W	6	0	0	0	0	0	6
WNW	16	0	0	0	0	0	16
NW	8	0	0	0	0	0	8
NNW	5	0	0	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	99	0	0	0	0	0	99

Hours of calm in this stability class: 33

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	10	9	0	0	0	19
NNE	0	13	7	0	0	0	20
NE	1	23	16	3	1	0	44
ENE	1	29	14	0	0	0	44
E	3	14	5	0	0	0	22
ESE	1	2	4	1	0	0	8
SE	0	5	8	1	1	0	15
SSE	0	3	5	1	0	0	9
S	0	7	7	1	0	0	15
SSW	0	0	5	16	8	2	31
SW	0	2	11	14	1	0	28
WSW	0	4	12	6	0	0	22
W	0	9	20	12	0	0	41
WNW	0	13	24	11	0	0	48
NW	0	10	31	3	0	0	44
NNW	0	15	9	6	0	0	30
Variable	0	0	0	0	0	0	0
Total	6	159	187	75	11	2	440

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	5	1	0	0	0	7
NNE	1	4	1	0	0	0	6
NE	2	9	3	1	0	0	15
ENE	1	10	3	0	0	0	14
E	1	5	1	0	0	0	7
ESE	0	2	2	0	0	0	4
SE	0	1	4	2	0	0	7
SSE	0	1	0	0	0	0	1
S	0	4	0	2	0	0	6
SSW	0	0	2	0	0	0	2
SW	0	2	1	3	0	0	6
WSW	0	4	6	2	0	0	12
W	0	1	2	3	0	2	8
WNW	1	4	3	0	0	0	8
NW	0	5	4	2	0	0	11
NNW	0	1	3	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	7	58	36	15	0	2	118

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	1	0	0	0	4
NNE	1	5	1	0	0	0	7
NE	2	3	1	1	0	0	7
ENE	1	4	2	0	0	0	7
E	0	0	0	0	0	0	0
ESE	1	0	1	0	0	0	2
SE	0	2	1	0	0	0	3
SSE	0	0	6	0	0	0	6
S	0	0	4	1	1	0	6
SSW	0	0	0	3	1	0	4
SW	0	0	2	4	0	0	6
WSW	0	0	2	1	1	0	4
W	0	0	0	1	1	3	5
WNW	1	3	1	3	0	0	8
NW	0	1	2	3	0	0	6
NNW	1	4	1	2	0	0	8
Variable	0	0	0	0	0	0	0
Total	8	24	25	19	4	3	83

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	12	8	0	0	0	21
NNE	2	9	3	1	0	0	15
NE	5	18	18	9	0	0	50
ENE	4	33	29	0	0	0	66
E	1	17	15	1	0	0	34
ESE	1	5	13	9	0	0	28
SE	0	6	10	5	0	0	21
SSE	1	2	12	10	0	0	25
S	2	2	5	5	1	0	15
SSW	0	1	8	22	19	0	50
SW	0	3	20	12	0	0	35
WSW	1	13	10	8	0	0	32
W	2	12	12	2	6	2	36
WNW	1	7	19	11	5	1	44
NW	1	8	26	11	0	0	46
NNW	2	5	18	2	0	0	27
Variable	0	0	0	0	0	0	0
Total	24	153	226	108	31	3	545

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	7	5	0	1	0	14
NNE	0	6	12	5	0	0	23
NE	1	7	46	4	0	0	58
ENE	1	28	42	0	0	0	71
E	2	9	35	2	0	0	48
ESE	0	4	14	7	0	0	25
SE	0	5	24	16	0	0	45
SSE	1	4	14	7	0	0	26
S	0	2	13	30	1	0	46
SSW	0	3	15	31	9	0	58
SW	0	7	10	10	1	0	28
WSW	0	6	15	6	0	0	27
W	0	3	20	3	2	0	28
WNW	1	8	26	3	3	1	42
NW	1	14	21	5	0	1	42
NNW	0	7	19	0	0	0	26
Variable	0	0	0	0	0	0	0
Total	8	120	331	129	17	2	607

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	5	1	0	0	8
NNE	0	3	6	0	0	0	9
NE	1	2	23	2	0	0	28
ENE	0	19	18	1	0	0	38
E	1	2	13	3	0	0	19
ESE	0	1	19	12	0	0	32
SE	1	6	6	1	0	0	14
SSE	0	2	1	0	0	0	3
S	0	3	4	0	0	0	7
SSW	0	4	3	0	0	0	7
SW	0	3	6	3	0	0	12
WSW	0	1	5	1	0	0	7
W	0	1	19	4	0	0	24
WNW	0	3	19	3	0	0	25
NW	0	2	22	1	0	0	25
NNW	2	4	15	0	0	0	21
Variable	0	0	0	0	0	0	0
Total	5	58	184	32	0	0	279

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: 4

Braidwood Generating Station

Period of Record: July - September 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	6	3	0	0	0	11
NNE	1	4	4	0	0	0	9
NE	2	5	9	1	0	0	17
ENE	2	7	8	0	0	0	17
E	2	1	7	2	0	0	12
ESE	0	3	3	1	0	0	7
SE	2	1	1	0	0	0	4
SSE	3	3	2	0	0	0	8
S	0	3	3	0	0	0	6
SSW	0	1	0	0	0	0	1
SW	1	1	0	0	0	0	2
WSW	1	0	1	0	0	0	2
W	0	0	5	2	0	0	7
WNW	0	0	6	0	0	0	6
NW	2	2	5	0	0	0	9
NNW	0	4	8	2	0	0	14
Variable	0	0	0	0	0	0	0
Total	18	41	65	8	0	0	132

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 4

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	0	0	0	3
NNE	0	0	3	0	0	0	3
NE	0	2	1	0	0	0	3
ENE	0	4	0	0	0	0	4
E	0	1	0	0	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	1	0	0	0	0	1
SSE	0	2	1	0	0	0	3
S	0	0	2	3	0	0	5
SSW	0	0	5	6	0	0	11
SW	0	2	3	0	0	0	5
WSW	0	0	10	0	0	0	10
W	0	5	11	7	0	0	23
WNW	0	2	6	0	0	0	8
NW	0	2	5	0	0	0	7
NNW	0	3	1	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	0	24	51	16	0	0	91

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

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	1	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	1	2	0	0	0	3
SSE	0	2	2	1	0	0	5
S	0	4	3	1	0	0	8
SSW	0	4	5	1	0	0	10
SW	1	0	4	0	0	0	5
WSW	0	2	5	1	0	0	8
W	0	4	3	3	0	0	10
WNW	0	2	1	0	0	0	3
NW	0	1	1	0	0	0	2
NNW	1	2	2	0	0	0	5
Variable	0	0	0	0	0	0	0
Total	2	22	30	7	0	0	61

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

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	1	2	0	0	0	0	3
ENE	1	1	0	0	0	0	2
E	1	0	0	0	0	0	1
ESE	0	1	0	0	0	0	1
SE	0	1	0	0	0	0	1
SSE	0	4	5	0	0	0	9
S	0	2	5	1	0	0	8
SSW	0	2	4	1	0	0	7
SW	0	0	4	1	0	0	5
WSW	0	4	3	0	0	0	7
W	0	3	2	0	0	0	5
WNW	1	7	0	0	0	0	8
NW	0	2	0	0	0	0	2
NNW	1	2	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	5	31	23	3	0	0	62

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	6	15	11	3	0	0	35
NNE	7	29	6	0	0	0	42
NE	13	40	25	0	0	0	78
ENE	7	52	33	0	0	0	92
E	15	28	25	0	0	0	68
ESE	6	14	13	1	0	0	34
SE	3	29	23	0	0	0	55
SSE	3	39	41	3	0	0	86
S	0	17	38	12	0	0	67
SSW	0	10	37	29	0	0	76
SW	3	23	60	25	0	0	111
WSW	3	59	56	13	9	1	141
W	14	48	42	20	0	0	124
WNW	5	38	34	1	0	0	78
NW	10	20	21	0	0	0	51
NNW	3	20	34	2	0	0	59
Variable	0	0	0	0	0	0	0
Total	98	481	499	109	9	1	1197

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

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	1	5	0	0	0	0	6
NNE	6	13	0	0	0	0	19
NE	6	11	0	0	0	0	17
ENE	13	5	0	0	0	0	18
E	13	13	10	0	0	0	36
ESE	11	31	10	1	0	0	53
SE	4	42	24	1	0	0	71
SSE	3	41	24	1	0	0	69
S	2	37	57	6	0	0	102
SSW	0	8	28	11	0	0	47
SW	2	10	14	2	0	0	28
WSW	2	31	11	1	0	0	45
W	11	13	5	2	0	0	31
WNW	16	17	2	0	0	0	35
NW	11	13	1	0	0	0	25
NNW	6	8	0	0	0	0	14
Variable	0	0	0	0	0	0	0
Total	107	298	186	25	0	0	616

Hours of calm in this stability class: 5

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	0	0	0	0	0	2
NNE	3	0	0	0	0	0	3
NE	3	2	0	0	0	0	5
ENE	3	0	0	0	0	0	3
E	14	2	0	0	0	0	16
ESE	4	6	0	0	0	0	10
SE	1	1	0	0	0	0	2
SSE	2	0	0	0	0	0	2
S	2	2	0	0	0	0	4
SSW	1	2	1	0	0	0	4
SW	3	2	0	0	0	0	5
WSW	5	8	0	0	0	0	13
W	9	2	0	0	0	0	11
WNW	12	7	0	0	0	0	19
NW	3	1	0	0	0	0	4
NNW	1	0	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	68	35	1	0	0	0	104

Hours of calm in this stability class: 2

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 34 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	6	0	0	0	0	0	6
ENE	2	0	0	0	0	0	2
E	5	0	0	0	0	0	5
ESE	4	1	0	0	0	0	5
SE	3	0	0	0	0	0	3
SSE	2	0	0	0	0	0	2
S	1	0	0	0	0	0	1
SSW	1	0	0	0	0	0	1
SW	3	0	0	0	0	0	3
WSW	3	0	0	0	0	0	3
W	5	0	0	0	0	0	5
WNW	4	0	0	0	0	0	4
NW	0	0	0	0	0	0	0
NNW	1	0	0	0	0	0	1
Variable	0	0	0	0	0	0	0
Total	40	1	0	0	0	0	41

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: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Extremely Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	1	0	0	3
NNE	0	0	2	1	0	0	3
NE	0	0	3	0	0	0	3
ENE	0	0	3	0	0	0	3
E	0	0	2	0	0	0	2
ESE	0	0	0	0	0	0	0
SE	0	0	1	0	0	0	1
SSE	0	0	2	0	1	0	3
S	1	0	1	1	2	0	5
SSW	0	0	2	4	6	0	12
SW	0	0	3	1	0	0	4
WSW	0	0	5	5	0	0	10
W	0	1	8	3	1	0	13
WNW	0	0	5	9	2	0	16
NW	0	0	1	4	0	0	5
NNW	0	2	1	1	0	0	4
Variable	0	0	0	0	0	0	0
Total	1	3	41	30	12	0	87

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: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Moderately Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	0	0	1	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	1	1	1	1	0	4
SSE	0	0	2	1	1	0	4
S	0	1	6	1	1	0	9
SSW	0	1	3	2	1	0	7
SW	0	1	3	2	0	0	6
WSW	1	1	4	1	0	0	7
W	0	1	3	0	2	0	6
WNW	0	0	0	2	0	0	2
NW	0	2	1	0	1	0	4
NNW	0	1	3	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	1	10	27	11	7	0	56

Hours of calm in this stability class: 0
 Hours of missing wind measurements in this stability class: 5
 Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Slightly Unstable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	1	0	2	0	0	0	3
ENE	1	0	1	0	0	0	2
E	1	0	0	0	0	0	1
ESE	0	1	0	0	0	0	1
SE	0	1	3	0	0	0	4
SSE	0	0	6	0	0	0	6
S	0	0	1	5	2	0	8
SSW	0	0	2	4	0	0	6
SW	0	0	3	1	1	0	5
WSW	0	1	2	2	0	0	5
W	1	1	1	2	0	0	5
WNW	0	3	4	0	0	0	7
NW	0	1	2	0	0	0	3
NNW	0	3	0	0	0	0	3
Variable	0	0	0	0	0	0	0
Total	4	11	27	14	3	0	59

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 3

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Neutral - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	3	17	6	3	0	31
NNE	0	4	25	5	0	0	34
NE	1	22	26	22	8	0	79
ENE	2	12	38	34	0	0	86
E	1	16	16	26	10	3	72
ESE	0	7	9	6	5	1	28
SE	3	10	22	18	7	0	60
SSE	1	6	33	25	13	0	78
S	0	3	12	28	15	3	61
SSW	0	2	12	36	26	5	81
SW	2	11	36	33	18	0	100
WSW	1	9	42	41	8	0	101
W	2	22	32	34	5	2	97
WNW	1	15	32	41	11	3	103
NW	3	8	20	23	8	0	62
NNW	2	8	19	31	2	0	62
Variable	0	0	0	0	0	0	0
Total	21	158	391	409	139	17	1135

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 63

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Slightly Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	2	1	5	0	0	0	8
NNE	2	2	5	6	0	0	15
NE	4	2	8	5	0	0	19
ENE	4	7	3	1	0	0	15
E	3	7	12	5	3	1	31
ESE	0	3	5	14	3	3	28
SE	0	4	32	29	2	1	68
SSE	0	4	33	32	8	0	77
S	0	6	16	53	12	2	89
SSW	2	0	17	24	12	1	56
SW	1	0	10	18	2	0	31
WSW	0	1	14	15	0	0	30
W	1	3	18	4	1	2	29
WNW	2	1	16	13	0	0	32
NW	0	2	22	8	0	0	32
NNW	0	1	12	1	0	0	14
Variable	0	0	0	0	0	0	0
Total	21	44	228	228	43	10	574

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 47

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Moderately Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	0	0	0	1
NNE	0	0	3	0	0	0	3
NE	0	2	0	5	0	0	7
ENE	0	0	1	0	0	0	1
E	0	0	1	5	0	0	6
ESE	0	0	7	3	0	0	10
SE	0	2	8	1	0	0	11
SSE	0	1	2	0	0	0	3
S	1	0	1	0	0	0	2
SSW	0	2	3	0	0	0	5
SW	0	2	2	1	0	0	5
WSW	0	1	5	1	0	0	7
W	0	0	3	3	0	0	6
WNW	0	3	5	9	0	0	17
NW	0	2	9	0	0	0	11
NNW	0	3	5	0	0	0	8
Variable	0	0	0	0	0	0	0
Total	1	18	56	28	0	0	103

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 3

Hours of missing stability measurements in all stability classes: 22

Braidwood Generating Station

Period of Record: October - December 2009
 Stability Class - Extremely Stable - 199Ft-30Ft Delta-T (F)
 Winds Measured at 203 Feet

Wind Direction	Wind Speed (in mph)						Total
	1-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	0	0	0	1
NNE	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	1	1	0	0	0	2
E	0	1	4	2	0	0	7
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	1	1	0	0	0	2
S	0	2	0	0	0	0	2
SSW	0	7	4	0	0	0	11
SW	0	2	0	0	0	0	2
WSW	0	2	0	0	0	0	2
W	1	4	2	0	0	0	7
WNW	0	2	0	0	0	0	2
NW	0	1	2	0	0	0	3
NNW	0	3	1	0	0	0	4
Variable	0	0	0	0	0	0	0
Total	1	28	15	2	0	0	46

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