

# RADIOACTIVE EFFLUENT RELEASE REPORT

January - December 2007

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.

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

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.

On 2/7/07, the Circulation Water Blowdown line composite sampler suction tubing was found frozen due to prolonged severe cold weather. Continuous sampling did not occur as required by the ODCM. Continuous sampling was restored on 2/12/07. The duration of the loss of continuous sampling was five days. There were no batch releases from the liquid release tanks during the time continuous sampling did not occur. There were no plant evolutions or system issues that would have affected the concentration of the weekly composite sample. This lack of continuous sampling had no further impact on the station's effluent monitoring.

4. b. On 9/7/07, the power to the Circulating Water Blowdown valve building was secured. Continuous sampling did not occur as required by the ODCM. Continuous sampling was restored on 9/10/07. The duration of the loss of continuous sampling was three days. There were no batch releases from the liquid release tanks during the time continuous sampling did not occur. There were no plant evolutions or system issues that would have affected the concentration of the weekly composite sample. This lack of continuous sampling had no further impact on the station's effluent monitoring.

On 10/1/07, the ground fault current interrupter on the Circulating Water Blowdown line composite sampler was found tripped. The composite sampler was not functioning due to power loss. Continuous sampling did not occur as required by the ODCM. Continuous sampling was restored immediately upon discovery of the problem by resetting the ground fault current interrupter. The duration of the loss of continuous sampling was less than four days. There was one batch release from a liquid release tank during this period on 9/30/07. The isotopes released are accounted for in the Batch Mode Releases for third quarter. There were no plant evolutions or system issues that would have affected the concentration of the weekly composite sample. This lack of continuous sampling had no further impact on the station's effluent monitoring.

- 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.

- d. Errata for 2006 Annual Radioactive Effluent Release Report

The cover letter for the Braidwood Station 2006 Annual Radioactive Effluent Release Report was dated April 30, 2006 and should have been dated April 2007. The letter described the period of the report as January 2005 through December 2005 and should have said January 2006 through December 2006.

The liquid release tables in the 2006 Annual Radioactive Effluent Release Report have been revised as follows:

- For both Unit 1 and Unit 2, the fourth quarter Continuous Mode was changed from 1.38E+00 Ci of tritium to 1.98E+01 Ci.
- For both Unit 1 and Unit 2, the fourth quarter Batch Mode was changed from 1.71E+02 Ci of tritium to 1.70E+01 Ci.
- For both Unit 1 and Unit 2 Summation of All Releases, fourth quarter tritium activity released was changed from 1.72E+02 Ci to 1.90E+02. This changed the calculated average concentration released from 4.76E-05  $\mu\text{Ci/ml}$  to 5.26E-05  $\mu\text{Ci/ml}$ . The percent of limit changed from 4.76E-01% to 5.26E-01%.

Calculations of offsite dose due to liquid releases were not affected by these changes. All previous offsite dose calculations were performed with the correct values for effluent tritium.

The 2006 Annual Radioactive Effluent Release Report for Braidwood Station should have included the following information about a sample anomaly for the wastewater treatment effluent release path:

On 10/14/06, the composite sampler on the Waste Water Treatment system discharge was found unplugged. The requirement for continuous sampling was not met. Continuous sampling was restored immediately upon discovery of the problem by plugging the compositor power cord into the electrical socket. The duration of the loss of continuous sampling was less than fifteen hours. The weekly composite did not contain any sample from this fifteen hour period. During this time there were no plant evolutions or system issues that would have affected the concentration of the weekly composite sample. This lack of continuous sampling had no further impact on the station's effluent monitoring.

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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	2.23E+00	1.13E+00	1.29E+00	4.57E+00	7.59
2. Average Release Rate	uCi/sec	2.87E-01	1.44E-01	1.62E-01	5.75E-01	
3. Percent of ODCM Limit - gamma	%	3.07E-04	6.59E-05	1.34E-04	5.95E-04	
4. Percent of ODCM Limit - beta	%	9.62E-04	6.84E-04	6.75E-07	2.13E-03	

**B. Iodine Releases**

1. Total I-131 Activity	Ci	7.94E-06	2.08E-05	8.89E-06	1.86E-04	33.20
2. Average Release Rate	uCi/sec	1.02E-06	2.65E-06	1.12E-06	2.34E-05	
3. Percent of ODCM Limit - gamma	%	3.44E-02	6.14E-02	2.87E-02	4.07E-01	

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

1. Gross Activity	Ci	2.22E-05	0.00E+00	2.54E-06	0.00E+00	19.80
2. Average Release Rate	uCi/sec	2.85E-06	0.00E+00	3.20E-07	0.00E+00	
3. Percent of ODCM Limit	%	3.44E-02	N/A	2.87E-02	N/A	
4. Gross Alpha Activity	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

**D. Tritium Releases**

1. Total Release Activity	Ci	1.01E+01	1.40E+01	5.84E+00	6.45E+00	8.07
2. Average Release Rate	uCi/sec	1.30E+00	1.78E+00	7.35E-01	8.11E-01	
3. Percent of ODCM Limit	%	3.44E-02	6.14E-02	2.87E-02	4.07E-01	

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

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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
<b>1. Fission Gases</b>									
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	6.95E-04	<LLD
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	2.93E-01	7.50E-01	5.14E-01	1.02E+00
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.22E-04	3.36E-07
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.62E-04	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.24E-07
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	4.84E-02	<LLD	5.84E-03	5.93E-02
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	1.89E+00	3.77E-01	7.65E-01	3.42E+00
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	4.90E-03	<LLD	3.67E-03	3.32E-02
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	3.76E-04	<LLD	4.30E-03	3.20E-02
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	1.06E-03
Total for Period	Ci	0.0	0.0	0.0	0.0	2.23E+00	1.13E+0	1.29E+00	4.57E+00
<b>2. Iodines</b>									
I-131	Ci	6.81E-07	1.71E-06	9.07E-07	2.40E-05	<LLD	<LLD	<LLD	<LLD
I-132	Ci	<LLD	<LLD	<LLD	1.19E-04	<LLD	<LLD	<LLD	<LLD
I-133	Ci	7.26E-06	1.91E-05	7.99E-06	4.37E-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	7.94E-06	2.08E-05	8.89E-06	1.86E-04	<LLD	<LLD	<LLD	<LLD
<b>3. Particulates</b>									
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	2.54E-06	<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	2.22E-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
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sn-117m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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
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
Total for Period	Ci	2.22E-05	0.0	2.54E-06	0.00	0.00	0.00	0.00	0.00
<b>4. Tritium</b>	Ci	9.83E+00	1.37E+01	5.56E+00	5.09E+00	2.71E-01	3.26E-01	2.81E-01	1.35E+00

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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	2.34E+00	8.50E-01	1.06E+00	4.36E+00	7.59
2. Average Release Rate	uCi/sec	3.01E-01	1.08E-01	1.33E-01	5.49E-01	
3. Percent of ODCM Limit - gamma	%	3.25E-04	2.18E-05	9.78E-05	5.61E-04	
4. Percent of ODCM Limit - beta	%	1.01E-03	5.77E-04	5.86E-04	2.05E-03	

**B. Iodine Releases**

1. Total I-131 Activity	Ci	0.00E+00	0.00E+00	0.00E+00	2.44E-04	33.20
2. Average Release Rate	uCi/sec	0.00E+00	0.00E+00	0.00E+00	3.07E-05	
3. Percent of ODCM Limit	%	N/A	N/A	N/A	9.06E-01	

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

1. Gross Activity	Ci	0.00E+00	1.10E-06	0.00E+00	6.79E-06	19.80
2. Average Release Rate	uCi/sec	0.00E+00	1.41E-07	0.00E+00	8.54E-07	
3. Percent of ODCM Limit	%	N/A	1.92E-02	N/A	9.06E-01	
4. Gross Alpha Activity	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

**D. Tritium Releases**

1. Total Release Activity	Ci	5.41E-01	6.76E+00	4.05E+00	5.66E+00	8.07
2. Average Release Rate	uCi/sec	6.96E-02	8.60E-01	5.10E-01	7.12E-01	
3. Percent of ODCM Limit	%	1.54E-03	1.92E-02	1.15E-02	9.06E-01	

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

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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
<b>1. Fission Gases</b>									
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	6.95E-04	<LLD
Kr-85	Ci	<LLD	<LLD	<LLD	<LLD	2.93E-01	7.50E-01	5.14E-01	1.02E+00
Kr-85m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.22E-04	3.36E-07
Kr-87	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.62E-04	<LLD
Kr-88	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.24E-07
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	4.84E-02	<LLD	5.84E-03	5.93E-02
Xe-133	Ci	<LLD	<LLD	<LLD	<LLD	2.00E+00	1.01E-01	5.35E-01	3.21E+00
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	4.90E-03	<LLD	3.67E-03	3.32E-02
Xe-135	Ci	<LLD	<LLD	<LLD	<LLD	3.76E-04	<LLD	4.30E-03	3.20E-02
Xe-135m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	1.06E-03
Xe-138	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	0.00	0.00	0.00	0.00	2.34E+00	8.50E-01	1.06E+00	4.36E+00
<b>2. Iodines</b>									
I-131	Ci	<LLD	<LLD	<LLD	5.54E-05	<LLD	<LLD	<LLD	<LLD
I-132	Ci	<LLD	<LLD	<LLD	1.72E-04	<LLD	<LLD	<LLD	<LLD
I-133	Ci	<LLD	<LLD	<LLD	1.65E-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	0.00	0.00	0.00	2.44E-04	0.00	0.00	0.00	0.00
<b>3. Particulates</b>									
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	<LLD	1.10E-06	<LLD	4.50E-07	<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
Sn-117m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD



BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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
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	6.34E-06	<LLD	<LLD	<LLD	<LLD
Total for Period	Ci	0.00	1.10E-06	0.00	6.79E-06	<LLD	<LLD	<LLD	<LLD
<b>4. Tritium</b>	Ci	2.86E-01	6.52E+00	3.74E+00	5.20E+00	2.55E-01	2.32E-01	3.15E-01	4.85E-01

BRAIDWOOD NUCLEAR POWER STATION  
 ANNUAL EFFLUENT REPORT FOR 2007  
 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	3.72E-05	2.14E-04	2.68E-05	1.40E-03	2.64
2. Average Concentration Released	uCi/ml	1.16E-11	7.38E-11	9.08E-12	2.87E-10	
3. Percent of limit	%	*	*	*	*	

**B. Tritium**

1. Total Activity Released	Ci	7.36E+01	1.07E+02	1.12E+02	1.50E+02	5.85
2. Average Concentration Released	uCi/ml	2.29E-05	3.69E-05	3.80E-05	3.07E-05	
3. % of Limit (1E-2 uCi/ml)	%	2.29E-01	3.69E-01	3.80E-01	3.07E-01	

**C. Dissolved Noble Gases**

1. Total Activity Released	Ci	0.00E+00	0.00E+00	1.54E-06	0.00E+00	2.64
2. Average Concentration Released	uCi/ml	0.00E+00	0.00E+00	5.22E-13	0.00E+00	
3. % of Limit (2E-4 uCi/ml)	%	0.00E+00	0.00E+00	2.61E-07	0.00E+00	

**D. Gross Alpha**

1. Total Activity Released	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	14.70
2. Average Concentration Released	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

**E. Volume of Releases**

1. Volume of Liquid Waste to Discharge	liters	2.46E+05	2.85E+05	2.34E+05	2.61E+05	
2. Volume of Dilution Water	liters	3.21E+09	2.90E+09	2.95E+09	4.88E+09	

Note: LLD Values are included in Appendix A 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 2007  
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	6.75E-01	1.07E+01	8.77E+00	3.86E+00	7.30E+01	9.61E+01	1.03E+02	1.46E+02
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.04E-04
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	3.15E-05
Fe-55	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	4.53E-06	4.40E-04
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.78E-04
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	3.72E-05	2.03E-04	2.22E-05	6.47E-05
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	<LLD	<LLD	<LLD	5.28E-05
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.33E-05
Nb-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zr-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	1.14E-06
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
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	<LLD	<LLD	5.74E-06
Sb-124	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-125	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.02E-05	<LLD	1.27E-05
Te-125m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	6.94E-06
I-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.51E-06
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	7.70E-07	<LLD

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.90E-05
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	1.78E-06
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	1.93E-05
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	<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
Np-239	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	6.75E-01	1.07E+01	8.77E+00	3.86E+00	7.30E+01	9.61E+01	1.03E+02	1.46E+02

BRAIDWOOD NUCLEAR POWER STATION  
ANNUAL EFFLUENT REPORT FOR 2007  
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	3.72E-05	2.14E-04	2.68E-05	1.40E-03	2.64
2. Average Concentration Released	uCi/ml	1.16E-11	7.38E-11	9.08E-12	2.87E-10	
3. Percent of Limit	%	*	*	*	*	

**B. Tritium**

1. Total Activity Released	Ci	7.36E+01	1.07E+02	1.12E+02	1.50E+02	5.85
2. Average Concentration Released	uCi/ml	2.29E-05	3.69E-05	3.80E-05	3.07E-05	
3. % of Limit (1E-3 uCi/ml)	%	2.29E-01	3.69E-01	3.80E-01	3.07E-01	

**C. Dissolved Noble Gases**

1. Total Activity Released	Ci	0.00E+00	0.00E+00	1.54E-06	0.00E+00	2.64
2. Average Concentration Released	uCi/ml	0.00E+00	0.00E+00	5.22E-13	0.00E+00	
3. % of Limit (2E-4 uCi/ml)	%	0.00E+00	0.00E+00	2.61E-07	0.00E+00	

**D. Gross Alpha**

1. Total Activity Released	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	14.70
2. Average Concentration Released	uCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	

**E. Volume of Releases**

1. Volume of Liquid Waste to Discharge	liters	2.46E+05	2.85E+05	2.34E+05	2.61E+05	
2. Volume of Dilution Water	liters	3.21E+09	2.90E+09	2.95E+09	4.88E+09	

Note: LLD Values are included in Appendix A 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 2007  
LIQUID RELEASES  
UNIT 2 (Docket Numbers 50-457)  
CONTINUOUS MODE & BATCH MODE

Nuclides Released	Unit	Continuous Mode				Batch Mode			
		Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter
		1	2	3	4	1	2	3	4
H-3	Ci	6.75E-01	1.07E+01	8.77E+00	3.86E+00	7.30E+01	9.61E+01	1.03E+02	1.46E+02
Ar-41	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.04E-04
Mn-54	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	3.15E-05
Fe-55	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	4.53E-06	4.40E-04
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.78E-04
Co-60	Ci	<LLD	<LLD	<LLD	<LLD	3.72E-05	2.03E-04	2.22E-05	6.47E-05
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	<LLD	<LLD	<LLD	5.28E-05
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.33E-05
Nb-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Zr-97	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Tc-99m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	1.14E-06
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
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	<LLD	<LLD	5.74E-06
Sb-124	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Sb-125	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	1.02E-05	<LLD	1.27E-05
Te-125m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Xe-131m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
I-131	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	6.94E-06
I-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Te-132	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	4.51E-06
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	7.70E-07	<LLD

BRAIDWOOD NUCLEAR POWER STATION  
 ANNUAL EFFLUENT REPORT FOR 2007  
 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
Xe-133m	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	2.90E-05
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	1.78E-06
Cs-137	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	1.93E-05
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	<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
Np-239	Ci	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD	<LLD
Total for period	Ci	6.75E-01	1.07E+01	8.77E+00	3.86E+00	7.30E+01	9.61E+01	1.03E+02	1.46E+02

BRAIDWOOD NUCLEAR POWER STATION  
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
 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 <sup>3</sup> )	Total Activity (Ci)	Period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc	2.31E+02	2.14E+02	Jan - Dec 2007	25
b. Dry compressible waste, contaminated equip, etc	6.50E+02	3.42E+00	Jan - Dec 2007	25
c. Irradiated components, control rods, etc	0	0	Jan - Dec 2007	N/A
d. Other (oil, reverse osmosis reject water, soil, Lagoon sediment)	3.41E+02	8.32E+01	Jan - Dec 2007	25

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

Major Nuclide Composition		%
a.	Ni-63	36.91%
	Co-58	21.12%
	Co-60	10.67%
	Fe-55	9.39%
	Cs-137	6.16%
	Mn-54	5.52%
	Cs-134	5.31%
	Sb-125	1.45%
	H-3	0.75%
	C-14	0.71%
	Co-57	0.47%
	Cr-51	0.42%
	Pu-241	0.28%
	Be-7	0.19%
	Nb-95	0.15%
	Ni-59	0.13%
	Zn-65	0.11%



BRAIDWOOD NUCLEAR POWER STATION  
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2006  
 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.	Fe-55	30.42%
	Co-58	21.57%
	Ni-63	19.16%
	Co-60	13.98%
	H-3	8.59%
	Cs-137	1.96%
	Mn-54	1.50%
	Cs-134	1.12%
	Sb-125	0.55%
	Nb-95	0.45%
	Co-57	0.23%
	Ni-59	0.20%
	C-14	0.16%
c.	N/A	N/A
d.	H-3	99.32%
	Co-58	0.27%
	Fe-55	0.16%

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
6	Hittman Transportation	Alaron Corp.
4	Hittman Transportation	Barnwell Waste Management Facility
30	Hittman Transportation	Duratek
20	Hittman Transportation	Duratek Services - Gallaher Rd.
2	Visionary Solutions, LLC	Duratek Services - Gallaher Rd.
8	Hittman Transportation	EnergySolutions, LLC (Containerized)
1	Hittman Transportation	Studsvik Processing Facility, LLC-Erwin

B. Irradiated Fuel Shipments (disposition)

No irradiated fuel shipments for January through December, 2007.

C. Changes to the Process Control Program

There were changes to the process control program in 2007. See Item #1 on page 18.

BRAIDWOOD NUCLEAR POWER STATION  
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
UNIT 1 AND 2 COMBINED (Docket Numbers 50-456 and 50-457)

1. There were changes in 2007 to RW-AA-100, Process Control Program for Radioactive Wastes. The changes were administrative in nature for the program and associated procedures. The changes included adding a descriptive name of a specific company's dewatering technology, addition of wording allowing oil dry inside waste containers, addition and clarification of related procedure references in RW-AA-100, instructions to include changes to the PCP in the Annual Radioactive Effluent Release Report, and clarification for review and approval of vendor procedures. The changes did not affect the physical processing of radioactive waste as described in the PCP. The changes did not affect the expected offsite dose resulting from processing or disposal of radioactive waste.
2. There were no changes to the liquid, gaseous, or solid radwaste treatment systems in 2007, and therefore, no affect on public dose due to changes in those 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 unplanned liquid releases in 2007. One unplanned gaseous release occurred in 2007. This release was from the U2 Feedwater System lasting 23 minutes and discharging 3.63E-03 Ci of activity (tritium). The dose from this release was insignificant and this release is included in the report totals.
5. The following effluent monitoring instruments exceeded their specified inoperability time in 2007:

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 high flow release path during the time of inoperability.

0PR-PR001 (Liquid Radwaste Effluent Line radiation monitor) exceeded its specified inoperability time (14 days) due to placement of a clearance order for the flowpath monitored by the 0RE-PR001. The radiation monitor was declared operable 9/7/07. No liquid releases took place during this time of inoperability.
6. Changes were made to the ODCM in 2007. A complete copy of the ODCM is included with this report along with a summary of changes. See Attachment 2 for the summary of changes.
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 27 through 48 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 2007  
UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)

APPENDIX A

LLD Tables

BRAIDWOOD NUCLEAR POWER STATION  
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
 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 2007  
 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 2006  
UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)

APPENDIX B

Supplemental Information

BRAIDWOOD NUCLEAR POWER STATION  
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
 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	3	7	8	13	31
2. Total Time Period for Batch Releases (minutes)	2,627	2,702	3,625	1,736	10,690
3. Maximum Time Period for a Batch Release (minutes)	980	1,430	2,030	369	N/A
4. Average Time Period for a Batch Release (minutes)	876	386	453	134	N/A
5. Minimum Time Period for a Batch Release (minutes)	787	77	23	54	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 2007  
 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	29	31	33	25	118
2. Total Time Period for Batch Releases (minutes)	1,241	2,033	5,933	24,822	34,029
3. Maximum Time Period for a Batch Release (minutes)	62	790	4,360	4,500	N/A
4. Average Time Period for a Batch Release (minutes)	43	66	180	993	N/A
5. Minimum Time Period for a Batch Release (minutes)	16	7	14	23	N/A
B. Abnormal Releases					
1. Number of Releases	0	0	0	0	0
2. Total Activity Released (Ci)	0.00	0.00	0.00	0.00	0.00



BRAIDWOOD NUCLEAR POWER STATION  
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
 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	32	28	30	32	122
2. Total Time Period for Batch Releases (minutes)	1,332	3,909	1,086	3,360	9,687
3. Maximum Time Period for a Batch Release (minutes)	177	659	60	486	N/A
4. Average Time Period for a Batch Release (minutes)	42	140	36	105	N/A
5. Minimum Time Period for a Batch Release (minutes)	5	15	14	18	N/A
B. Abnormal Releases					
1. Number of Releases	0	0	1	0	0
2. Total Activity Released (Ci)	0	0	3.63E-03	0	0

BRAIDWOOD NUCLEAR POWER STATION  
 RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
 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	13	16	16	14	59
2. Total Time Period for Batch Releases (minutes)	2,786	3,264	2,953	3,579	12,582
3. Maximum Time Period for a Batch Release (minutes)	282	238	306	298	N/A
4. Average Time Period for a Batch Release	214	204	185	256	N/A
5. Minimum Time Period for a Batch Release (minutes)	196	37	19	207	N/A
6. Average Stream Flow During Periods of Release of Effluent into a Flowing Stream (liters/min)	1.83E+07	9.04E+06	4.87E+06	7.39E+06	N/A
<b>B. Abnormal Releases</b>					
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....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 00:00  
 Period Duration (min): 5.256E+05  
 Coefficient Type.....: Historical  
 Unit.....: 1

=== RELEASE DATA =====  
 Total Release Duration (minutes)..... 2.161E+05  
 Total Release Volume (cf)..... 2.681E+10  
 Average Release Flowrate (cfm)..... 1.241E+05  
  
 Average Period Flowrate (cfm)..... 5.101E+04

=== NUCLIDE DATA =====

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
AR-41	6.95E+02	9.15E-13	9.15E-05	1.00E-08
KR-85M	4.23E+02	5.57E-13	5.57E-06	1.00E-07
KR-85	2.58E+06	3.40E-09	4.86E-03	7.00E-07
KR-87	2.62E+02	3.45E-13	1.72E-05	2.00E-08
XE-133M	4.18E+04	5.50E-11	9.17E-05	6.00E-07
KR-88	2.24E-01	2.95E-16	3.27E-08	9.00E-09
XE-131M	1.13E+05	1.49E-10	7.47E-05	2.00E-06
XE-135	3.67E+04	4.84E-11	6.91E-04	7.00E-08
XE-133	6.45E+06	8.50E-09	1.70E-02	5.00E-07
XE-138	1.06E+03	1.39E-12	6.97E-05	2.00E-08
F&AG	9.23E+06	1.22E-08	2.29E-02	
I-131	2.73E+01	3.60E-14	1.80E-04	2.00E-10
I-132	1.19E+02	1.56E-13	7.82E-06	2.00E-08
I-133	7.81E+01	1.03E-13	1.03E-04	1.00E-09
Iodine	2.24E+02	2.95E-13	2.91E-04	
BR-82	2.22E+01	2.92E-14	5.84E-06	5.00E-09
Other	2.22E+01	2.92E-14	5.84E-06	
H-3	3.64E+07	4.79E-08	4.79E-01	1.00E-07
H-3	3.64E+07	4.79E-08	4.79E-01	
CO-57	2.54E+00	3.35E-15	3.72E-06	9.00E-10
P>=8	2.54E+00	3.35E-15	3.72E-06	

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

Release ID.....: 1 All Gas Release Types  
Period Start Date....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (min): 5.256E+05  
Coefficient Type.....: Historical  
Unit.....: 1

=== NUCLIDE DATA =====

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
Total	4.56E+07	6.01E-08	5.03E-01	

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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	0.00E+00	4.22E-07
AINHL	5.52E-08	9.62E-04	9.81E-04	9.62E-04	9.62E-04	9.62E-04	0.00E+00	9.62E-04
AVEG	1.23E-06	1.73E-03	2.29E-03	1.73E-03	1.73E-03	1.73E-03	0.00E+00	1.73E-03
AGMILK	5.25E-06	1.20E-03	3.61E-03	1.20E-03	1.19E-03	1.19E-03	0.00E+00	1.19E-03
ACMEAT	1.53E-07	2.48E-04	3.20E-04	2.49E-04	2.48E-04	2.48E-04	0.00E+00	2.48E-04
ACMILK	4.37E-06	5.89E-04	2.60E-03	5.94E-04	5.83E-04	5.85E-04	0.00E+00	5.86E-04
TGPD	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	0.00E+00	4.22E-07
TINHL	7.75E-08	9.71E-04	9.95E-04	9.71E-04	9.71E-04	9.71E-04	0.00E+00	9.71E-04
TVEG	1.17E-06	1.98E-03	2.44E-03	1.98E-03	1.98E-03	1.98E-03	0.00E+00	1.98E-03
TGMILK	9.52E-06	1.56E-03	5.38E-03	1.57E-03	1.55E-03	1.55E-03	0.00E+00	1.55E-03
TCMEAT	1.27E-07	1.48E-04	2.00E-04	1.48E-04	1.48E-04	1.48E-04	0.00E+00	1.48E-04
TCMILK	7.93E-06	7.70E-04	3.95E-03	7.78E-04	7.58E-04	7.61E-04	0.00E+00	7.64E-04
CGPD	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	0.00E+00	4.22E-07
CINHL	1.05E-07	8.57E-04	8.86E-04	8.58E-04	8.57E-04	8.57E-04	0.00E+00	8.57E-04
CVEG	2.18E-06	3.07E-03	3.78E-03	3.07E-03	3.07E-03	3.07E-03	0.00E+00	3.07E-03
CGMILK	2.31E-05	2.47E-03	1.00E-02	2.49E-03	2.45E-03	2.45E-03	0.00E+00	2.46E-03
CCMEAT	2.35E-07	1.79E-04	2.58E-04	1.80E-04	1.79E-04	1.79E-04	0.00E+00	1.79E-04
CCMILK	1.93E-05	1.22E-03	7.53E-03	1.23E-03	1.20E-03	1.20E-03	0.00E+00	1.21E-03
IGPD	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	4.22E-07	0.00E+00	4.22E-07
IINHL	8.36E-08	4.93E-04	5.19E-04	4.93E-04	4.93E-04	4.93E-04	0.00E+00	4.93E-04
IGMILK	4.82E-05	3.78E-03	2.22E-02	3.79E-03	3.72E-03	3.72E-03	0.00E+00	3.74E-03
ICMILK	4.02E-05	1.87E-03	1.72E-02	1.88E-03	1.82E-03	1.82E-03	0.00E+00	1.84E-03

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

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	1.15E-05	4.73E-03	9.79E-03	4.74E-03	4.71E-03	4.71E-03	0.00E+00	4.72E-03
TEEN	1.93E-05	5.43E-03	1.30E-02	5.45E-03	5.40E-03	5.41E-03	0.00E+00	5.41E-03
CHILD	4.53E-05	7.80E-03	2.25E-02	7.83E-03	7.76E-03	7.76E-03	0.00E+00	7.78E-03
INFANT	8.89E-05	6.14E-03	3.99E-02	6.16E-03	6.04E-03	6.04E-03	0.00E+00	6.08E-03

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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	3.99E-02	31-day	2.25E-01	1.77E+01	3.00E-01	1.33E+01
Qrtr->End	INFANT	THYROID	3.99E-02	Quarter	5.63E+00	7.09E-01	7.50E+00	5.32E-01
Year->End	INFANT	THYROID	3.99E-02	Annual	1.13E+01	3.55E-01	1.50E+01	2.66E-01

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

Nuclide Percentage

H-3	1.51E+01
I-131	8.27E+01
I-132	2.05E-03
I-133	2.18E+00

=== 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	7.78E-03	31-day	1.50E-01	5.19E+00	2.00E-01	3.89E+00
Qrtr->End	CHILD	TBODY	7.78E-03	Quarter	5.25E+00	1.48E-01	7.50E+00	1.04E-01
Year->End	CHILD	TBODY	7.78E-03	Annual	1.05E+01	7.41E-02	1.50E+01	5.19E-02

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

Nuclide Percentage

H-3	9.97E+01
I-131	3.20E-01
I-132	1.09E-03
I-133	1.17E-02

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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	5.51E-05	31-day	1.50E-01	3.68E-02	2.00E-01	2.76E-02
Qrtr->End	Gamma	5.51E-05	Quarter	3.75E+00	1.47E-03	5.00E+00	1.10E-03
Year->End	Gamma	5.51E-05	Annual	7.50E+00	7.35E-04	1.00E+01	5.51E-04

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

Nuclide	Percentage
AR-41	2.65E-01
KR-85M	2.13E-02
KR-85	1.82E+00
KR-87	6.61E-02
XE-133M	5.59E-01
KR-88	1.39E-04
XE-131M	7.25E-01
XE-135	2.89E+00
XE-133	9.33E+01
XE-138	3.99E-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	4.45E-04	31-day	3.00E-01	1.48E-01	4.00E-01	1.11E-01
Qrtr->End	Beta	4.45E-04	Quarter	7.50E+00	5.94E-03	1.00E+01	4.45E-03
Year->End	Beta	4.45E-04	Annual	1.50E+01	2.97E-03	2.00E+01	2.23E-03

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

Nuclide	Percentage
AR-41	1.88E-02
KR-85M	6.88E-03
KR-85	4.16E+01
KR-87	2.23E-02
XE-133M	5.11E-01
KR-88	5.42E-06
XE-131M	1.04E+00
XE-135	7.47E-01
XE-133	5.60E+01

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

Release ID.....: 1 All Gas Release Types  
Period Start Date....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (min): 5.256E+05  
Coefficient Type.....: Historical  
Unit.....: 1

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

Nuclide	Percentage
-----	-----
XE-138	4.15E-02



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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 00:00  
 Period Duration (min): 5.256E+05  
 Coefficient Type.....: Historical  
 Unit.....: 2

=== RELEASE DATA =====  
 Total Release Duration (minutes)..... 1.696E+05  
 Total Release Volume (cf)..... 1.081E+10  
 Average Release Flowrate (cfm)..... 6.373E+04  
 Average Period Flowrate (cfm)..... 2.056E+04

=== NUCLIDE DATA =====

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
AR-41	6.95E+02	2.27E-12	2.27E-04	1.00E-08
KR-85M	4.23E+02	1.38E-12	1.38E-05	1.00E-07
KR-85	2.58E+06	8.44E-09	1.21E-02	7.00E-07
KR-87	2.62E+02	8.55E-13	4.27E-05	2.00E-08
XE-133M	4.18E+04	1.37E-10	2.28E-04	6.00E-07
KR-88	2.24E-01	7.31E-16	8.12E-08	9.00E-09
XE-131M	1.13E+05	3.71E-10	1.85E-04	2.00E-06
XE-135	3.67E+04	1.20E-10	1.71E-03	7.00E-08
XE-133	5.85E+06	1.91E-08	3.82E-02	5.00E-07
XE-138	1.06E+03	3.46E-12	1.73E-04	2.00E-08
F&AG	8.62E+06	2.82E-08	5.28E-02	
I-131	5.54E+01	1.81E-13	9.05E-04	2.00E-10
I-132	1.72E+02	5.62E-13	2.81E-05	2.00E-08
I-133	1.65E+01	5.40E-14	5.40E-05	1.00E-09
Iodine	2.44E+02	7.97E-13	9.87E-04	
BR-82	1.55E+00	5.07E-15	1.01E-06	5.00E-09
Other	1.55E+00	5.07E-15	1.01E-06	
H-3	1.70E+07	5.56E-08	5.56E-01	1.00E-07
H-3	1.70E+07	5.56E-08	5.56E-01	
ND-147	6.34E+00	2.07E-14	2.07E-05	1.00E-09
P>=8	6.34E+00	2.07E-14	2.07E-05	

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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 00:00  
 Period Duration (min): 5.256E+05  
 Coefficient Type.....: Historical  
 Unit.....: 2

=== NUCLIDE DATA =====

Nuclide	uCi	Average uCi/cc	ECrcent Ratio	EC
-----	-----	-----	-----	-----
Total	2.56E+07	8.38E-08	6.10E-01	

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

Release ID.....: 1 All Gas Release Types  
Period Start Date....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 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 AGE GROUP, PATHWAY, ORGAN (mrem) ===

Age/Path	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
AGPD	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	0.00E+00	6.57E-07
AINHL	6.52E-08	4.50E-04	4.76E-04	4.50E-04	4.50E-04	4.50E-04	0.00E+00	4.50E-04
AVEG	2.35E-06	8.10E-04	1.90E-03	8.13E-04	8.07E-04	8.08E-04	0.00E+00	8.09E-04
AGMILK	1.03E-05	5.70E-04	5.37E-03	5.81E-04	5.56E-04	5.60E-04	0.00E+00	5.64E-04
ACMEAT	3.10E-07	1.16E-04	2.61E-04	1.17E-04	1.16E-04	1.16E-04	0.00E+00	1.16E-04
ACMILK	8.57E-06	2.85E-04	4.28E-03	2.93E-04	2.72E-04	2.76E-04	0.00E+00	2.79E-04
TGPD	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	0.00E+00	6.57E-07
TINHL	9.15E-08	4.54E-04	4.86E-04	4.54E-04	4.54E-04	4.54E-04	0.00E+00	4.54E-04
TVEG	2.23E-06	9.26E-04	1.83E-03	9.29E-04	9.23E-04	9.24E-04	0.00E+00	9.25E-04
TGMILK	1.87E-05	7.49E-04	8.34E-03	7.68E-04	7.23E-04	7.28E-04	0.00E+00	7.37E-04
TCMEAT	2.57E-07	6.95E-05	1.74E-04	6.97E-05	6.91E-05	6.93E-05	0.00E+00	6.93E-05
TCMILK	1.56E-05	3.76E-04	6.70E-03	3.92E-04	3.55E-04	3.59E-04	0.00E+00	3.66E-04
CGPD	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	0.00E+00	6.57E-07
CINHL	1.24E-07	4.01E-04	4.37E-04	4.01E-04	4.01E-04	4.01E-04	0.00E+00	4.01E-04
CVEG	4.15E-06	1.44E-03	2.81E-03	1.44E-03	1.43E-03	1.43E-03	0.00E+00	1.44E-03
CGMILK	4.53E-05	1.19E-03	1.62E-02	1.22E-03	1.15E-03	1.15E-03	0.00E+00	1.17E-03
CCMEAT	4.77E-07	8.42E-05	2.42E-04	8.45E-05	8.38E-05	8.39E-05	0.00E+00	8.40E-05
CCMILK	3.77E-05	6.00E-04	1.31E-02	6.24E-04	5.62E-04	5.65E-04	0.00E+00	5.83E-04
IGPD	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	6.57E-07	0.00E+00	6.57E-07
IINHL	9.80E-08	2.31E-04	2.64E-04	2.31E-04	2.31E-04	2.31E-04	0.00E+00	2.31E-04
IGMILK	9.45E-05	1.85E-03	3.83E-02	1.87E-03	1.74E-03	1.74E-03	0.00E+00	1.79E-03
ICMILK	7.87E-05	9.45E-04	3.13E-02	9.60E-04	8.52E-04	8.55E-04	0.00E+00	8.93E-04

=== PERIOD DOSE BY AGE GROUP, ORGAN (mrem) ===

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	2.22E-05	2.23E-03	1.23E-02	2.25E-03	2.20E-03	2.21E-03	0.00E+00	2.22E-03
TEEN	3.75E-05	2.58E-03	1.75E-02	2.61E-03	2.52E-03	2.54E-03	0.00E+00	2.55E-03
CHILD	8.84E-05	3.71E-03	3.28E-02	3.77E-03	3.63E-03	3.63E-03	0.00E+00	3.68E-03
INFANT	1.74E-04	3.03E-03	6.98E-02	3.06E-03	2.82E-03	2.83E-03	0.00E+00	2.91E-03

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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	6.98E-02	31-day	2.25E-01	3.10E+01	3.00E-01	2.33E+01
Qrtr->End	INFANT	THYROID	6.98E-02	Quarter	5.63E+00	1.24E+00	7.50E+00	9.31E-01
Year->End	INFANT	THYROID	6.98E-02	Annual	1.13E+01	6.21E-01	1.50E+01	4.66E-01

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

Nuclide Percentage

H-3	4.04E+00
I-131	9.56E+01
I-132	1.69E-03
I-133	2.63E-01
ND-147	4.01E-05

=== 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	3.68E-03	31-day	1.50E-01	2.45E+00	2.00E-01	1.84E+00
Qrtr->End	CHILD	TBODY	3.68E-03	Quarter	5.25E+00	7.00E-02	7.50E+00	4.90E-02
Year->End	CHILD	TBODY	3.68E-03	Annual	1.05E+01	3.50E-02	1.50E+01	2.45E-02

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

Nuclide Percentage

H-3	9.87E+01
I-131	1.37E+00
I-132	3.35E-03
I-133	5.22E-03
ND-147	7.67E-04

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

Release ID.....: 1 All Gas Release Types  
 Period Start Date....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	5.03E-05	31-day	1.50E-01	3.35E-02	2.00E-01	2.52E-02
Qrtr->End	Gamma	5.03E-05	Quarter	3.75E+00	1.34E-03	5.00E+00	1.01E-03
Year->End	Gamma	5.03E-05	Annual	7.50E+00	6.71E-04	1.00E+01	5.03E-04

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

Nuclide	Percentage
AR-41	2.90E-01
KR-85M	2.33E-02
KR-85	1.99E+00
KR-87	7.24E-02
XE-133M	6.13E-01
KR-88	1.53E-04
XE-131M	7.94E-01
XE-135	3.16E+00
XE-133	9.26E+01
XE-138	4.37E-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	4.22E-04	31-day	3.00E-01	1.41E-01	4.00E-01	1.05E-01
Qrtr->End	Beta	4.22E-04	Quarter	7.50E+00	5.62E-03	1.00E+01	4.22E-03
Year->End	Beta	4.22E-04	Annual	1.50E+01	2.81E-03	2.00E+01	2.11E-03

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

Nuclide	Percentage
AR-41	1.99E-02
KR-85M	7.26E-03
KR-85	4.39E+01
KR-87	2.35E-02
XE-133M	5.39E-01
KR-88	5.72E-06
XE-131M	1.10E+00
XE-135	7.88E-01
XE-133	5.36E+01

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

Release ID.....: 1 All Gas Release Types  
Period Start Date....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (min): 5.256E+05  
Coefficient Type.....: Historical  
Unit.....: 2

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

Nuclide	Percentage
XE-138	4.38E-02

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

Release ID.....: 1 All Liquid Release Types  
Period Start Date.....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 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)..... 1.587E+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
SB-125	2.28E+01
TE-123M	5.74E+00
CR-51	4.04E+02
MN-54	3.15E+01
FE-59	2.78E+02
CO-58	4.45E+02
CO-60	3.28E+02
ZR-95	4.33E+01
NB-95	5.28E+01
TC-99M	1.14E+00
TE-132	4.51E+00
I-131	6.94E+00
CS-134	2.90E+01
CS-136	1.78E+00
CS-137	1.93E+01
Gamma	1.67E+03
XE-133	1.54E+00
D&EG	1.54E+00
H-3	4.42E+08
Beta	4.42E+08
Total	4.42E+08

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

Release ID.....: 1 All Liquid Release Types  
Period Start Date.....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (mins): 5.256E+05



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

Release ID.....: 1 All Liquid Release Types  
 Period Start Date.....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	7.02E-07	8.93E-02	8.93E-02	8.93E-02	8.93E-02	8.93E-02	0.00E+00	8.93E-02
AFWFSp	4.80E-04	3.79E-02	3.70E-02	3.73E-02	3.71E-02	3.95E-02	0.00E+00	3.77E-02
TPWtr	6.71E-07	6.29E-02	6.29E-02	6.29E-02	6.29E-02	6.29E-02	0.00E+00	6.29E-02
TFWFSp	5.02E-04	2.94E-02	2.84E-02	2.87E-02	2.85E-02	3.02E-02	0.00E+00	2.88E-02
CPWtr	1.91E-06	1.21E-01	1.21E-01	1.21E-01	1.21E-01	1.21E-01	0.00E+00	1.21E-01
CFWFSp	6.18E-04	2.44E-02	2.35E-02	2.38E-02	2.36E-02	2.42E-02	0.00E+00	2.37E-02
IPWtr	2.07E-06	1.19E-01	1.19E-01	1.19E-01	1.19E-01	1.19E-01	0.00E+00	1.19E-01

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

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	4.81E-04	1.27E-01	1.26E-01	1.27E-01	1.26E-01	1.29E-01	0.00E+00	1.27E-01
TEEN	5.03E-04	9.23E-02	9.13E-02	9.16E-02	9.14E-02	9.31E-02	0.00E+00	9.17E-02
CHILD	6.20E-04	1.45E-01	1.44E-01	1.45E-01	1.44E-01	1.45E-01	0.00E+00	1.45E-01
INFANT	2.07E-06	1.19E-01	1.19E-01	1.19E-01	1.19E-01	1.19E-01	0.00E+00	1.19E-01

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

Release ID.....: 1 All Liquid Release Types  
 Period Start Date.....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	1.45E-01	31-day	1.50E-01	9.68E+01	2.00E-01	7.26E+01
Qrtr->End	CHILD	LIVER	1.45E-01	Quarter	3.75E+00	3.87E+00	5.00E+00	2.90E+00
Year->End	CHILD	LIVER	1.45E-01	Annual	7.50E+00	1.94E+00	1.00E+01	1.45E+00

Critical Pathway.....: 0 Potable Water (PWtr)  
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	9.92E+01
CR-51	0.00E+00
MN-54	2.17E-03
FE-59	1.23E-02
CO-58	6.96E-04
CO-60	1.50E-03
ZR-95	1.39E-07
NB-95	2.20E-04
TC-99M	6.45E-10
TE-132	1.30E-04
I-131	3.74E-05
CS-134	3.55E-01
CS-136	3.66E-03
CS-137	1.93E-01

=== 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	1.45E-01	31-day	4.50E-02	3.21E+02	6.00E-02	2.41E+02
Qrtr->End	CHILD	TBODY	1.45E-01	Quarter	1.13E+00	1.28E+01	1.50E+00	9.63E+00
Year->End	CHILD	TBODY	1.45E-01	Annual	2.25E+00	6.42E+00	3.00E+00	4.82E+00

Critical Pathway.....: 0 Potable Water (PWtr)  
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	9.96E+01
CR-51	1.18E-05
MN-54	5.80E-04
FE-59	6.17E-03

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

Release ID.....: 1 All Liquid Release Types  
Period Start Date.....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (mins): 5.256E+05

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

Nuclide	Percentage
-----	-----
CO-58	2.14E-03
CO-60	4.46E-03
ZR-95	1.24E-07
NB-95	1.58E-04
TC-99M	1.07E-08
TE-132	1.57E-04
I-131	2.14E-05
CS-134	7.54E-02
CS-136	2.39E-03
CS-137	2.86E-02

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

Release ID.....: 1 All Liquid Release Types
Period Start Date.....: 01/01/2007 00:00
Period End Date.....: 01/01/2008 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)..... 1.587E+06
Total Undiluted Volume Released (gallons)..... NA
Average Undiluted Flowrate (gpm)..... NA
Total Dilution Volume (gallons)..... NA
Average Dilution Flowrate (gpm)..... NA

Table with 2 columns: Nuclide, uCi. Rows include SB-125, TE-123M, CR-51, MN-54, FE-59, CO-58, CO-60, ZR-95, NB-95, TC-99M, TE-132, I-131, CS-134, CS-136, CS-137, Gamma, XE-133, D&EG, H-3, Beta, and Total.

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

Release ID.....: 1 All Liquid Release Types  
Period Start Date.....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (mins): 5.256E+05

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

Release ID.....: 1 All Liquid Release Types  
 Period Start Date.....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	7.02E-07	8.93E-02	8.93E-02	8.93E-02	8.93E-02	8.93E-02	0.00E+00	8.93E-02
AFWFSp	4.80E-04	3.79E-02	3.70E-02	3.73E-02	3.71E-02	3.95E-02	0.00E+00	3.77E-02
TPWtr	6.71E-07	6.29E-02	6.29E-02	6.29E-02	6.29E-02	6.29E-02	0.00E+00	6.29E-02
TFWFSp	5.02E-04	2.94E-02	2.84E-02	2.87E-02	2.85E-02	3.02E-02	0.00E+00	2.88E-02
CPWtr	1.91E-06	1.21E-01	1.21E-01	1.21E-01	1.21E-01	1.21E-01	0.00E+00	1.21E-01
CFWFSp	6.18E-04	2.44E-02	2.35E-02	2.38E-02	2.36E-02	2.42E-02	0.00E+00	2.37E-02
IPWtr	2.07E-06	1.19E-01	1.19E-01	1.19E-01	1.19E-01	1.19E-01	0.00E+00	1.19E-01

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

Agegroup	Bone	Liver	Thyroid	Kidney	Lung	GI-Lli	Skin	TB
ADULT	4.81E-04	1.27E-01	1.26E-01	1.27E-01	1.26E-01	1.29E-01	0.00E+00	1.27E-01
TEEN	5.03E-04	9.23E-02	9.13E-02	9.16E-02	9.14E-02	9.31E-02	0.00E+00	9.17E-02
CHILD	6.20E-04	1.45E-01	1.44E-01	1.45E-01	1.44E-01	1.45E-01	0.00E+00	1.45E-01
INFANT	2.07E-06	1.19E-01	1.19E-01	1.19E-01	1.19E-01	1.19E-01	0.00E+00	1.19E-01

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

Release ID.....: 1 All Liquid Release Types  
 Period Start Date.....: 01/01/2007 00:00  
 Period End Date.....: 01/01/2008 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	1.45E-01	31-day	1.50E-01	9.68E+01	2.00E-01	7.26E+01
Qrtr->End	CHILD	LIVER	1.45E-01	Quarter	3.75E+00	3.87E+00	5.00E+00	2.90E+00
Year->End	CHILD	LIVER	1.45E-01	Annual	7.50E+00	1.94E+00	1.00E+01	1.45E+00

Critical Pathway.....: 0 Potable Water (PWtr)  
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	9.92E+01
CR-51	0.00E+00
MN-54	2.17E-03
FE-59	1.23E-02
CO-58	6.96E-04
CO-60	1.50E-03
ZR-95	1.39E-07
NB-95	2.20E-04
TC-99M	6.45E-10
TE-132	1.30E-04
I-131	3.74E-05
CS-134	3.55E-01
CS-136	3.66E-03
CS-137	1.93E-01

=== 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	1.45E-01	31-day	4.50E-02	3.21E+02	6.00E-02	2.41E+02
Qrtr->End	CHILD	TBODY	1.45E-01	Quarter	1.13E+00	1.28E+01	1.50E+00	9.63E+00
Year->End	CHILD	TBODY	1.45E-01	Annual	2.25E+00	6.42E+00	3.00E+00	4.82E+00

Critical Pathway.....: 0 Potable Water (PWtr)  
 Major Contributors.....: 0.0 % or greater to total

Nuclide Percentage

H-3	9.96E+01
CR-51	1.18E-05
MN-54	5.80E-04
FE-59	6.17E-03

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

Release ID.....: 1 All Liquid Release Types  
Period Start Date.....: 01/01/2007 00:00  
Period End Date.....: 01/01/2008 00:00  
Period Duration (mins): 5.256E+05

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

Nuclide	Percentage
CO-58	2.14E-03
CO-60	4.46E-03
ZR-95	1.24E-07
NB-95	1.58E-04
TC-99M	1.07E-08
TE-132	1.57E-04
I-131	2.14E-05
CS-134	7.54E-02
CS-136	2.39E-03
CS-137	2.86E-02



BRAIDWOOD NUCLEAR POWER STATION  
RADIOACTIVE EFFLUENT RELEASE REPORT FOR 2007  
UNIT 1 AND 2 (Docket Numbers 50-456 and 50-457)

ATTACHMENT 1

Tables 7-11  
Wind Direction and Stability Classes

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

All Stabilities

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	2	7	17	0	3	6	1	0	0	36
NNE	0	0	4	6	20	13	7	5	9	0	0	64
NE	0	0	7	6	27	28	14	15	10	0	0	107
ENE	0	4	8	10	19	14	4	0	0	0	0	59
E	0	1	16	16	30	41	17	4	0	0	0	125
ESE	0	1	6	11	36	22	26	2	3	0	0	107
SE	0	1	3	6	20	20	2	2	0	0	0	54
SSE	0	1	1	9	15	19	7	17	3	0	0	72
S	0	0	1	1	8	20	21	22	33	9	0	115
SSW	0	0	1	1	15	32	30	56	46	22	1	204
SW	0	3	2	4	18	34	43	55	28	7	0	194
WSW	0	4	14	10	63	35	30	27	25	12	0	220
W	0	5	23	20	73	62	37	32	26	8	0	286
WNW	0	4	22	27	63	63	27	46	15	0	0	267
NW	0	3	16	13	33	49	18	12	3	0	0	147
NNW	0	7	7	4	23	13	25	9	0	0	0	88
Tot	0	34	133	151	480	465	311	310	202	58	1	2145

Hours of Calm . . . . . 10  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 2157  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	2	0	0	0	0	2
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	2	2	0	0	0	4
ENE	0	0	0	0	0	3	3	0	0	0	0	6
E	0	0	0	0	2	4	0	0	0	0	0	6
ESE	0	0	0	0	0	1	1	0	0	0	0	2
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	2	0	1	2	0	0	5
SW	0	0	0	0	1	1	0	2	0	0	0	4
WSW	0	0	0	0	0	0	0	0	4	0	0	4
W	0	0	0	0	0	0	2	2	1	4	0	9
WNW	0	0	0	0	2	9	3	3	2	0	0	19
NW	0	0	0	0	0	12	3	2	0	0	0	17
NNW	0	0	0	0	0	4	3	2	0	0	0	9
Tot	0	0	0	0	5	36	19	14	9	4	0	87

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 87  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	1	0	0	0	0	1
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	1	0	0	0	1
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	1	1	0	0	0	0	0	0	2
ESE	0	0	0	0	1	1	2	0	0	0	0	4
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	1	1	0	2	1	0	0	5
SW	0	0	0	0	0	1	1	4	3	0	0	9
WSW	0	0	0	0	2	1	1	1	3	0	0	8
W	0	0	0	0	0	0	0	1	2	1	0	4
WNW	0	0	0	0	1	2	2	6	3	0	0	14
NW	0	0	0	0	0	5	0	3	1	0	0	9
NNW	0	0	0	0	1	0	1	2	0	0	0	4
Tot	0	0	0	1	8	11	8	20	13	1	0	62

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 62  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	1	0	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0	1	0	0	0	1
NE	0	0	0	0	1	0	1	0	0	0	0	2
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	1	2	1	0	0	0	0	0	4
ESE	0	0	0	0	0	3	1	0	0	0	0	4
SE	0	0	0	0	0	4	0	0	0	0	0	4
SSE	0	0	0	0	0	5	1	0	0	0	0	6
S	0	0	0	0	0	2	0	0	0	0	0	2
SSW	0	0	0	0	0	1	2	2	0	0	0	5
SW	0	0	0	0	1	1	2	5	1	0	0	10
WSW	0	0	0	0	2	0	2	2	2	0	0	8
W	0	0	0	0	2	8	2	2	4	1	0	19
WNW	0	0	0	0	2	3	1	7	0	0	0	13
NW	0	0	0	0	0	2	1	2	1	0	0	6
NNW	0	0	0	0	0	1	4	1	0	0	0	6
Tot	0	0	0	1	12	31	17	22	8	1	0	92

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 92  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	2	10	0	0	6	1	0	0	20
NNE	0	0	3	3	16	11	6	3	9	0	0	51
NE	0	0	5	3	19	28	11	10	2	0	0	78
ENE	0	3	1	5	15	10	1	0	0	0	0	35
E	0	0	5	8	17	30	11	2	0	0	0	73
ESE	0	0	1	2	21	16	12	1	2	0	0	55
SE	0	0	0	2	8	7	1	1	0	0	0	19
SSE	0	0	0	3	9	8	5	9	2	0	0	36
S	0	0	0	0	2	10	17	17	22	8	0	76
SSW	0	0	0	0	5	15	14	24	37	19	1	115
SW	0	0	1	0	5	23	27	35	21	7	0	119
WSW	0	0	1	1	16	24	21	23	16	12	0	114
W	0	0	0	3	30	31	22	23	18	2	0	129
WNW	0	0	0	5	17	23	17	25	9	0	0	96
NW	0	0	3	2	14	22	14	5	1	0	0	61
NNW	0	1	1	0	11	6	11	3	0	0	0	33
Tot	0	4	22	39	215	264	190	187	140	48	1	1110

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 1113  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	5	5	0	0	0	0	0	0	11
NNE	0	0	1	2	4	2	1	1	0	0	0	11
NE	0	0	1	3	7	0	0	2	8	0	0	21
ENE	0	1	7	5	2	1	0	0	0	0	0	16
E	0	1	11	6	8	6	6	2	0	0	0	40
ESE	0	1	4	9	14	1	10	1	1	0	0	41
SE	0	1	3	3	11	9	1	1	0	0	0	29
SSE	0	1	0	4	4	6	1	8	1	0	0	25
S	0	0	1	1	6	8	4	5	11	1	0	37
SSW	0	0	1	1	8	11	4	26	6	3	0	60
SW	0	1	1	2	11	8	13	9	3	0	0	48
WSW	0	2	5	5	25	9	6	1	0	0	0	53
W	0	2	12	7	27	23	11	4	1	0	0	87
WNW	0	1	8	12	40	26	4	5	1	0	0	97
NW	0	1	9	10	19	8	0	0	0	0	0	47
NNW	0	0	5	3	11	2	6	1	0	0	0	28
Tot	0	12	70	78	202	120	67	66	32	4	0	651

Hours of Calm . . . . . 7  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 658  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 34ft Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	1	0	0	0	0	0	0	1
NNE	0	0	0	1	0	0	0	0	0	0	0	1
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	1	0	0	0	0	0	0	0	0	1
SE	0	0	0	1	1	0	0	0	0	0	0	2
SSE	0	0	0	2	2	0	0	0	0	0	0	4
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	1	2	9	1	0	0	0	13
SW	0	1	0	2	0	0	0	0	0	0	0	3
WSW	0	1	5	4	18	1	0	0	0	0	0	29
W	0	3	10	8	13	0	0	0	0	0	0	34
WNW	0	3	13	10	1	0	0	0	0	0	0	27
NW	0	0	4	1	0	0	0	0	0	0	0	5
NNW	0	0	1	1	0	0	0	0	0	0	0	2
Tot	0	8	34	30	37	3	9	1	0	0	0	122

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 123  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 34ft Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	1	0	0	0	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	1	0	0	0	0	0	0	0	0	1
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	1	0	0	0	0	1
SW	0	1	0	0	0	0	0	0	0	0	0	1
WSW	0	1	3	0	0	0	0	0	0	0	0	4
W	0	0	1	2	1	0	0	0	0	0	0	4
WNW	0	0	1	0	0	0	0	0	0	0	0	1
NW	0	2	0	0	0	0	0	0	0	0	0	2
NNW	0	6	0	0	0	0	0	0	0	0	0	6
Tot	0	10	7	2	1	0	1	0	0	0	0	21

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 22  
 Hours of Missing Data . . . . . 3  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

All Stabilities

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	0	0	16	14	7	5	4	0	47
NNE	0	0	0	1	2	13	16	7	7	2	7	55
NE	0	1	0	2	7	9	17	19	24	20	9	108
ENE	0	0	1	4	4	13	11	16	6	0	1	56
E	0	0	0	0	6	17	11	14	30	21	16	115
ESE	0	0	0	1	3	14	21	19	35	15	5	113
SE	0	0	1	0	4	9	7	11	15	7	0	54
SSE	0	0	0	1	5	17	12	6	15	15	4	75
S	0	0	0	0	2	8	8	14	29	29	41	131
SSW	0	0	0	0	4	7	8	21	40	74	52	206
SW	0	0	1	0	7	14	21	26	56	36	15	176
WSW	0	0	0	0	9	9	25	34	41	29	22	169
W	0	0	0	1	11	18	39	45	62	23	14	213
WNW	0	0	0	0	10	26	34	57	97	77	17	318
NW	0	0	0	2	6	25	44	53	43	11	5	189
NNW	0	0	0	0	3	11	5	25	32	2	1	99
Tot	0	1	4	12	83	226	313	374	537	365	209	2124

Hours of Calm . . . . . 8  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 2134  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	1	0	0	0	1
NNE	0	0	0	0	0	0	0	0	1	0	0	1
NE	0	0	0	0	0	0	0	0	3	0	0	3
ENE	0	0	0	0	0	0	0	3	2	0	0	5
E	0	0	0	0	0	0	1	3	1	0	0	5
ESE	0	0	0	0	0	0	1	0	4	0	0	5
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	1	2	0	1	1	1	6
SW	0	0	0	0	0	1	0	0	0	0	0	1
WSW	0	0	0	0	0	0	0	0	1	3	0	4
W	0	0	0	0	0	0	0	2	2	2	3	9
WNW	0	0	0	0	0	1	2	5	3	6	1	18
NW	0	0	0	0	0	0	6	10	2	2	0	20
NNW	0	0	0	0	0	0	4	1	4	0	0	9
Tot	0	0	0	0	0	3	16	25	24	14	5	87

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 87  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	1	0	0	0	1
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0	0	1	0	0	1
ENE	0	0	0	0	0	1	0	0	0	0	0	1
E	0	0	0	0	1	0	1	0	0	0	0	2
ESE	0	0	0	0	0	0	1	1	2	0	0	4
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	1	0	1	2	3	0	7
SW	0	0	0	0	0	0	1	0	3	2	0	6
WSW	0	0	0	0	2	1	0	0	1	0	0	4
W	0	0	0	0	0	0	0	0	3	3	1	7
WNW	0	0	0	0	0	1	1	0	3	9	1	15
NW	0	0	0	0	0	0	2	2	1	2	2	9
NNW	0	0	0	0	0	1	0	0	3	1	0	5
Tot	0	0	0	0	3	5	6	5	19	20	4	62

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 62  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	1	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	0	0	0	0	1	0	0	1	1	0	3
ENE	0	0	0	0	0	1	0	0	0	0	0	1
E	0	0	0	0	0	1	1	0	2	0	0	4
ESE	0	0	0	0	0	0	3	1	2	0	0	6
SE	0	0	0	0	0	0	1	1	0	0	0	2
SSE	0	0	0	0	0	0	4	1	1	0	0	6
S	0	0	0	0	0	1	1	0	0	0	0	2
SSW	0	0	0	0	0	1	0	2	4	1	0	8
SW	0	0	0	0	1	1	0	0	3	1	0	6
WSW	0	0	0	0	1	1	0	0	3	1	0	6
W	0	0	0	0	1	3	2	2	1	4	1	14
WNW	0	0	0	0	0	2	5	2	1	7	1	18
NW	0	0	0	0	0	1	2	1	2	1	1	8
NNW	0	0	0	0	0	0	1	3	2	0	1	7
Tot	0	0	0	0	3	14	20	13	22	16	4	92

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 92  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	0	0	7	2	2	2	4	0	18
NNE	0	0	0	1	2	10	9	5	4	2	7	40
NE	0	1	0	2	7	7	10	18	19	16	2	82
ENE	0	0	1	4	3	9	8	12	4	0	0	41
E	0	0	0	0	1	9	4	8	22	18	12	74
ESE	0	0	0	0	1	6	9	12	16	8	2	54
SE	0	0	0	0	2	7	3	4	3	6	0	25
SSE	0	0	0	1	2	6	6	2	8	7	3	35
S	0	0	0	0	1	3	3	9	19	22	29	86
SSW	0	0	0	0	2	1	2	16	26	39	38	124
SW	0	0	1	0	1	7	11	15	38	15	12	100
WSW	0	0	0	0	2	5	14	20	25	22	22	110
W	0	0	0	0	5	12	22	13	23	13	8	96
WNW	0	0	0	0	3	9	18	12	31	40	10	123
NW	0	0	0	1	2	5	11	13	22	6	2	62
NNW	0	0	0	0	2	6	8	4	15	1	0	36
Tot	0	1	3	9	36	109	140	165	277	219	147	1106

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 1109  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	7	8	1	2	0	0	18
NNE	0	0	0	0	0	3	6	1	2	0	0	12
NE	0	0	0	0	0	1	6	1	0	3	7	18
ENE	0	0	0	0	1	2	3	1	0	0	1	8
E	0	0	0	0	4	7	4	3	5	3	4	30
ESE	0	0	0	1	2	8	6	5	11	7	3	43
SE	0	0	1	0	2	2	3	6	12	1	0	27
SSE	0	0	0	0	3	11	1	0	4	8	1	28
S	0	0	0	0	0	4	4	5	10	7	12	42
SSW	0	0	0	0	1	2	4	2	7	29	12	57
SW	0	0	0	0	5	5	8	10	11	9	3	51
WSW	0	0	0	0	3	0	9	12	9	3	0	36
W	0	0	0	1	3	1	11	17	20	1	1	55
WNW	0	0	0	0	7	5	5	28	48	15	4	112
NW	0	0	0	1	4	16	14	14	12	0	0	61
NNW	0	0	0	0	1	3	9	15	8	0	0	36
Tot	0	0	1	3	36	77	101	121	161	86	48	634

Hours of Calm . . . . . 6  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 640  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	1	1	1	0	0	3
NNE	0	0	0	0	0	0	0	1	0	0	0	1
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	1	0	0	0	0	1
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	1	3	2	0	0	6
S	0	0	0	0	1	0	0	0	0	0	0	1
SSW	0	0	0	0	1	0	0	0	0	1	1	3
SW	0	0	0	0	0	0	1	1	1	8	0	11
WSW	0	0	0	0	0	2	2	2	2	0	0	8
W	0	0	0	0	2	0	1	9	13	0	0	25
WNW	0	0	0	0	0	8	3	9	10	0	0	30
NW	0	0	0	0	0	3	9	13	4	0	0	29
NNW	0	0	0	0	0	1	1	2	0	0	0	4
Tot	0	0	0	0	4	14	20	41	33	9	1	122

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 123  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jan - Mar for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	1	3	1	0	0	0	5
NNE	0	0	0	0	0	0	1	0	0	0	0	1
NE	0	0	0	0	0	0	1	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0	0	0	0	0	0
SSW	0	0	0	0	0	1	0	0	0	0	0	1
SW	0	0	0	0	0	0	0	0	0	1	0	1
WSW	0	0	0	0	1	0	0	0	0	0	0	1
W	0	0	0	0	0	2	3	2	0	0	0	7
WNW	0	0	0	0	0	0	0	1	1	0	0	2
NW	0	0	0	0	0	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	2	0	0	0	0	2
Tot	0	0	0	0	1	4	10	4	1	1	0	21

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 21  
 Hours of Missing Data . . . . . 26  
 Hours in Period . . . . . 2160

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

All Stabilities

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	4	18	14	1	0	1	0	0	39
NNE	0	3	12	11	23	36	22	10	0	0	0	117
NE	0	10	12	27	37	20	37	12	5	0	0	160
ENE	0	22	44	34	42	16	16	4	3	0	0	181
E	1	19	38	38	52	28	12	1	0	0	0	189
ESE	0	9	21	18	36	14	15	3	0	0	0	116
SE	0	2	11	18	48	10	6	1	0	0	0	96
SSE	0	2	7	22	45	26	12	9	0	0	0	123
S	0	2	2	5	38	49	37	18	14	5	0	170
SSW	0	1	2	4	12	30	13	16	21	17	6	122
SW	0	5	5	3	28	27	15	11	13	4	0	111
WSW	0	2	12	23	39	25	29	7	3	3	0	143
W	0	6	9	16	49	30	11	7	13	4	0	145
WNW	0	17	13	11	32	38	23	26	11	4	0	175
NW	0	9	12	13	26	24	16	23	4	0	0	127
NNW	0	7	7	15	24	14	14	7	1	0	0	89
Tot	1	116	208	262	549	401	279	155	89	37	6	2103

Hours of Calm . . . . . 79  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 2184  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	1	2	0	0	0	0	0	3
NNE	0	0	0	1	1	5	4	2	0	0	0	13
NE	0	0	0	4	7	5	15	5	0	0	0	36
ENE	0	0	1	3	12	4	0	0	0	0	0	20
E	0	0	0	6	5	7	5	0	0	0	0	23
ESE	0	0	1	2	8	2	4	0	0	0	0	17
SE	0	0	0	2	7	1	2	0	0	0	0	12
SSE	0	0	0	1	2	3	4	1	0	0	0	11
S	0	0	0	0	0	7	9	4	1	1	0	22
SSW	0	0	0	0	0	0	2	3	7	4	1	17
SW	0	0	0	0	2	0	2	2	3	0	0	9
WSW	0	0	0	1	3	1	10	2	0	2	0	19
W	0	0	0	2	6	5	1	1	2	0	0	17
WNW	0	0	0	0	4	6	6	12	0	0	0	28
NW	0	0	0	1	5	11	7	11	4	0	0	39
NNW	0	0	0	0	7	4	7	1	0	0	0	19
Tot	0	0	2	23	70	63	78	44	17	7	1	305

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 307  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	1	1	0	0	1	0	0	4
NNE	0	0	1	1	3	1	1	1	0	0	0	8
NE	0	0	1	3	3	1	5	0	0	0	0	13
ENE	0	0	2	1	1	0	0	0	0	0	0	4
E	0	0	0	2	2	8	1	0	0	0	0	13
ESE	0	0	0	2	0	0	0	1	0	0	0	3
SE	0	0	0	2	6	0	0	0	0	0	0	8
SSE	0	0	0	0	8	1	1	0	0	0	0	10
S	0	0	0	1	2	0	3	2	0	1	0	9
SSW	0	0	0	0	2	2	0	1	0	3	2	10
SW	0	0	0	1	1	1	3	0	2	0	0	8
WSW	0	0	0	2	0	3	5	3	2	1	0	16
W	0	0	0	0	2	2	1	3	0	1	0	9
WNW	0	0	1	0	2	4	1	1	0	0	0	9
NW	0	0	1	1	3	0	2	3	0	0	0	10
NNW	0	0	0	2	1	2	1	0	1	0	0	7
Tot	0	0	6	19	37	26	24	15	6	6	2	141

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 141  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	5	0	0	0	0	0	0	5
NNE	0	0	0	0	1	0	3	3	0	0	0	7
NE	0	0	1	2	2	1	3	1	0	0	0	10
ENE	0	0	1	2	1	3	1	0	0	0	0	8
E	0	0	1	1	4	0	0	0	0	0	0	6
ESE	0	0	0	1	1	1	1	0	0	0	0	4
SE	0	0	0	1	3	1	0	0	0	0	0	5
SSE	0	0	0	0	8	2	1	0	0	0	0	11
S	0	0	0	2	4	1	2	1	0	0	0	10
SSW	0	0	0	0	3	2	1	1	2	1	1	11
SW	0	0	0	0	2	1	1	0	0	2	0	6
WSW	0	0	0	0	1	4	3	0	0	0	0	8
W	0	0	0	1	2	2	0	1	2	1	0	9
WNW	0	0	0	1	6	2	0	1	1	0	0	11
NW	0	0	0	2	2	2	0	2	0	0	0	8
NNW	0	0	0	2	2	1	0	2	0	0	0	7
Tot	0	0	3	15	47	23	16	12	5	4	1	126

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 126  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	4	8	0	0	0	0	0	13
NNE	0	0	1	1	10	21	12	3	0	0	0	48
NE	0	0	1	6	15	11	14	5	2	0	0	54
ENE	0	0	9	16	20	9	15	4	2	0	0	75
E	0	0	8	11	27	12	6	1	0	0	0	65
ESE	0	0	4	2	12	6	6	2	0	0	0	32
SE	0	0	1	1	9	6	1	0	0	0	0	18
SSE	0	0	0	6	7	7	2	1	0	0	0	23
S	0	0	0	1	8	13	11	5	5	1	0	44
SSW	0	0	0	1	4	14	4	4	5	9	2	43
SW	0	0	2	1	12	14	6	6	8	2	0	51
WSW	0	1	0	4	14	8	9	2	1	0	0	39
W	0	0	1	3	20	16	9	2	9	2	0	62
WNW	0	0	2	3	12	20	15	12	10	4	0	78
NW	0	1	4	1	12	8	7	7	0	0	0	40
NNW	0	0	5	2	5	5	6	4	0	0	0	27
Tot	0	2	38	60	191	178	123	58	42	18	2	712

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 713  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	1	7	3	1	0	0	0	0	13
NNE	0	1	10	7	8	9	2	1	0	0	0	38
NE	0	2	9	12	10	2	0	1	3	0	0	39
ENE	0	6	26	11	8	0	0	0	1	0	0	52
E	0	8	24	13	14	1	0	0	0	0	0	60
ESE	0	2	6	11	14	5	4	0	0	0	0	42
SE	0	0	7	11	20	2	3	1	0	0	0	44
SSE	0	0	4	15	20	13	4	7	0	0	0	63
S	0	0	1	1	24	27	12	6	8	2	0	81
SSW	0	0	1	2	2	10	6	7	7	0	0	35
SW	0	1	1	1	10	11	3	3	0	0	0	30
WSW	0	0	5	9	19	9	2	0	0	0	0	44
W	0	2	6	4	18	5	0	0	0	0	0	35
WNW	0	6	7	6	8	6	1	0	0	0	0	34
NW	0	3	2	8	4	3	0	0	0	0	0	20
NNW	0	3	1	5	6	2	0	0	0	0	0	17
Tot	0	34	111	117	192	108	38	26	19	2	0	647

Hours of Calm . . . . . 7  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 654  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	0	0	0	0	0	0	0	1
NNE	0	2	0	1	0	0	0	0	0	0	0	3
NE	0	3	0	0	0	0	0	0	0	0	0	3
ENE	0	14	5	1	0	0	0	0	0	0	0	20
E	0	8	2	3	0	0	0	0	0	0	0	13
ESE	0	4	7	0	1	0	0	0	0	0	0	12
SE	0	0	2	1	3	0	0	0	0	0	0	6
SSE	0	2	3	0	0	0	0	0	0	0	0	5
S	0	0	1	0	0	1	0	0	0	0	0	2
SSW	0	0	0	1	0	1	0	0	0	0	0	2
SW	0	2	1	0	1	0	0	0	0	0	0	4
WSW	0	0	2	5	2	0	0	0	0	0	0	9
W	0	2	1	3	1	0	0	0	0	0	0	7
WNW	0	9	1	1	0	0	0	0	0	0	0	11
NW	0	2	4	0	0	0	0	0	0	0	0	6
NNW	0	1	0	4	3	0	0	0	0	0	0	8
Tot	0	49	29	21	11	2	0	0	0	0	0	112

Hours of Calm . . . . . 19  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 131  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	0	0	0	0	0
NE	0	5	0	0	0	0	0	0	0	0	0	5
ENE	0	2	0	0	0	0	0	0	0	0	0	2
E	1	3	3	2	0	0	0	0	0	0	0	9
ESE	0	3	3	0	0	0	0	0	0	0	0	6
SE	0	2	1	0	0	0	0	0	0	0	0	3
SSE	0	0	0	0	0	0	0	0	0	0	0	0
S	0	2	0	0	0	0	0	0	0	0	0	2
SSW	0	1	1	0	1	1	0	0	0	0	0	4
SW	0	2	1	0	0	0	0	0	0	0	0	3
WSW	0	1	5	2	0	0	0	0	0	0	0	8
W	0	2	1	3	0	0	0	0	0	0	0	6
WNW	0	2	2	0	0	0	0	0	0	0	0	4
NW	0	3	1	0	0	0	0	0	0	0	0	4
NNW	0	3	1	0	0	0	0	0	0	0	0	4
Tot	1	31	19	7	1	1	0	0	0	0	0	60

Hours of Calm . . . . . 52  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 112  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

All Stabilities

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	8	12	12	13	2	1	0	49
NNE	0	0	1	4	9	11	15	25	28	4	0	97
NE	0	1	2	5	16	21	23	31	45	13	6	163
ENE	0	0	5	10	36	48	32	24	16	5	2	178
E	0	3	4	6	23	37	35	38	43	12	4	205
ESE	0	0	2	6	13	17	29	16	20	15	6	124
SE	0	0	1	2	10	19	19	26	13	4	0	94
SSE	0	1	1	5	10	20	17	20	13	6	4	97
S	0	0	0	1	11	18	23	36	63	26	23	201
SSW	0	0	3	2	10	11	10	19	34	25	41	155
SW	0	1	2	1	14	16	9	22	16	12	13	106
WSW	0	1	0	0	11	15	23	31	40	2	3	126
W	0	0	2	4	5	26	29	17	21	8	5	117
WNW	0	0	2	1	17	27	22	35	51	16	26	197
NW	0	2	1	9	15	24	24	13	40	41	3	172
NNW	0	3	1	11	15	25	19	11	12	3	0	100
Tot	0	12	27	68	223	347	341	377	457	193	136	2181

Hours of Calm . . . . . 3  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 2184  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	1	0	0	0	5	3	1	0	10
NE	0	0	0	2	3	1	3	3	18	3	0	33
ENE	0	0	1	4	6	9	4	1	0	0	0	25
E	0	0	2	0	5	4	4	2	7	0	0	24
ESE	0	0	1	1	3	4	4	1	2	5	0	21
SE	0	0	0	1	0	3	3	2	2	0	0	11
SSE	0	0	0	1	0	1	2	4	2	0	0	10
S	0	0	0	0	0	0	2	12	4	2	2	22
SSW	0	0	0	0	0	0	0	1	2	4	10	17
SW	0	0	0	0	2	0	0	1	2	2	2	9
WSW	0	0	0	0	3	1	1	3	6	0	2	16
W	0	0	0	1	1	4	4	1	2	1	1	15
WNW	0	0	0	0	2	3	2	4	10	7	1	29
NW	0	0	0	1	1	5	6	1	11	18	0	43
NNW	0	0	0	0	2	8	6	4	1	1	0	22
Tot	0	0	4	12	28	43	41	45	72	44	18	307

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 307  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	1	1	1	0	0	1	0	4
NNE	0	0	0	0	1	1	0	0	1	0	0	3
NE	0	0	1	1	4	0	2	2	4	0	0	14
ENE	0	0	2	1	1	0	1	0	2	0	0	7
E	0	0	0	1	1	1	0	1	5	3	0	12
ESE	0	0	0	0	1	1	0	0	0	0	1	3
SE	0	0	0	0	3	4	1	0	0	0	0	8
SSE	0	1	0	1	0	3	2	0	1	0	0	8
S	0	0	0	1	2	2	2	0	4	1	1	13
SSW	0	0	0	0	3	0	0	2	0	1	5	11
SW	0	0	0	0	0	1	0	1	1	1	1	5
WSW	0	0	0	0	2	0	2	5	4	1	1	15
W	0	0	0	0	0	2	3	0	4	1	1	11
WNW	0	0	0	0	0	1	2	3	1	0	2	9
NW	0	0	0	0	1	3	0	0	2	3	0	9
NNW	0	0	0	2	1	3	1	1	1	0	0	9
Tot	0	1	3	7	21	23	17	15	30	12	12	141

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 141  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevation: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	1	2	0	0	0	0	0	4
NNE	0	0	0	0	0	2	0	1	3	0	0	6
NE	0	0	1	0	1	0	1	1	4	1	0	9
ENE	0	0	0	1	4	0	1	2	1	0	0	9
E	0	0	0	1	2	0	2	3	0	0	0	8
ESE	0	0	0	1	0	2	0	1	1	0	0	5
SE	0	0	0	1	1	1	0	1	0	0	0	4
SSE	0	0	0	0	1	3	1	2	0	0	0	7
S	0	0	0	0	3	5	2	0	3	0	0	13
SSW	0	0	0	0	0	3	2	0	1	3	3	12
SW	0	0	0	0	1	1	1	0	0	0	2	5
WSW	0	0	0	0	0	2	1	1	4	0	0	8
W	0	0	0	1	1	1	1	0	0	1	1	6
WNW	0	0	0	0	3	4	0	1	2	0	3	13
NW	0	0	0	2	1	2	0	3	1	1	1	11
NNW	0	0	0	1	2	1	0	0	1	1	0	6
Tot	0	0	1	9	21	29	12	16	21	7	10	126

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 126  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	4	3	3	1	0	0	11
NNE	0	0	0	1	2	3	6	16	12	2	0	42
NE	0	0	0	1	2	5	6	12	19	8	3	56
ENE	0	0	0	1	10	10	11	13	13	5	1	64
E	0	1	0	0	9	13	9	18	18	9	4	81
ESE	0	0	0	2	5	2	9	2	4	6	3	33
SE	0	0	0	0	0	1	4	4	6	0	0	15
SSE	0	0	0	3	4	3	6	0	1	0	0	17
S	0	0	0	0	2	3	4	12	15	5	8	49
SSW	0	0	0	0	2	0	6	8	7	6	16	45
SW	0	0	2	0	3	9	4	7	7	7	8	47
WSW	0	0	0	0	3	5	13	8	11	1	0	41
W	0	0	0	1	2	9	10	5	5	5	2	39
WNW	0	0	1	0	5	7	7	12	23	8	20	83
NW	0	0	1	2	6	2	7	2	20	19	2	61
NNW	0	0	0	4	4	4	2	3	9	1	0	27
Tot	0	1	4	15	59	80	107	125	171	82	67	711

Hours of Calm . . . . . 2  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 713  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector <0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	1	5	4	1	0	0	12
NNE	0	0	1	1	3	9	3	9	1	0	27
NE	0	0	1	3	10	8	13	0	1	3	39
ENE	0	0	2	1	8	22	14	7	0	0	55
E	0	1	0	1	5	12	13	11	12	0	55
ESE	0	0	0	2	6	12	8	10	4	2	44
SE	0	0	0	4	9	7	17	3	4	0	44
SSE	0	0	1	0	2	6	4	12	9	6	44
S	0	0	0	0	7	12	12	37	18	12	98
SSW	0	0	1	1	2	2	8	22	11	7	55
SW	0	1	0	1	3	2	12	4	2	0	26
WSW	0	0	0	1	7	6	10	14	0	0	38
W	0	0	1	0	6	8	7	9	0	0	32
WNW	0	0	0	2	7	8	10	8	1	0	36
NW	0	0	1	4	6	8	5	6	0	0	30
NNW	0	1	1	3	3	8	2	0	0	0	19
Tot	0	3	6	8	39	110	126	144	48	29	654

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 654  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	1	1	2	6	0	0	0	10
NNE	0	0	1	0	1	1	0	0	0	0	0	3
NE	0	1	0	0	1	2	3	0	0	0	0	7
ENE	0	0	0	1	6	4	1	1	0	0	0	13
E	0	0	1	1	1	7	6	1	1	0	0	8
ESE	0	0	0	0	1	1	3	2	2	0	0	9
SE	0	0	1	0	0	1	4	1	2	0	0	9
SSE	0	0	0	0	2	2	2	2	0	0	0	8
S	0	0	0	0	0	0	1	0	0	0	0	1
SSW	0	0	2	0	0	2	0	0	2	0	0	6
SW	0	0	0	0	2	0	1	1	0	0	0	4
WSW	0	0	0	0	0	0	0	4	1	0	0	5
W	0	0	0	1	0	3	2	2	1	0	0	9
WNW	0	0	0	0	2	3	2	3	1	0	0	11
NW	0	1	0	1	1	3	1	1	0	0	0	8
NNW	0	1	0	1	0	4	2	1	0	0	0	9
Tot	0	3	5	5	18	34	30	25	10	0	0	130

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 131  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Apr - Jun for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed - Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	4	3	1	0	0	0	0	8
NNE	0	0	0	1	4	1	0	0	0	0	0	6
NE	0	0	0	0	2	3	0	0	0	0	0	5
ENE	0	0	0	1	1	3	0	0	0	0	0	5
E	0	1	1	2	0	0	1	2	0	0	0	7
ESE	0	0	1	2	1	1	1	2	1	0	0	9
SE	0	0	0	0	2	0	0	1	0	0	0	3
SSE	0	0	0	0	1	2	0	0	0	0	0	3
S	0	0	0	0	4	1	0	0	0	0	0	5
SSW	0	0	0	1	4	4	0	0	0	0	0	9
SW	0	0	0	0	5	2	1	0	2	0	0	10
WSW	0	1	0	0	2	0	0	0	0	0	0	3
W	0	0	1	0	0	1	1	2	0	0	0	5
WNW	0	0	1	1	3	2	1	2	6	0	0	16
NW	0	1	0	2	1	3	2	1	0	0	0	10
NNW	0	1	0	2	3	2	0	0	0	0	0	8
Tot	0	4	4	12	37	28	8	10	9	0	0	112

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 112  
 Hours of Missing Data . . . . . 0  
 Hours in Period . . . . . 2184

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

All Stabilities

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	19	15	12	19	4	2	1	0	0	0	72
NNE	3	22	22	20	41	24	6	0	0	0	0	138
NE	2	24	27	28	46	17	1	0	0	0	0	45
ENE	1	57	30	28	36	1	0	0	0	0	0	153
E	1	46	57	24	8	0	0	0	0	0	0	136
ESE	0	15	29	35	40	2	1	0	0	0	0	122
SE	0	4	13	33	51	20	1	0	0	0	0	122
SSE	0	3	11	20	61	34	7	3	0	0	0	139
S	0	4	10	7	49	47	34	16	5	0	0	172
SSW	0	7	5	9	30	68	50	11	10	0	0	190
SW	0	6	7	6	29	39	41	14	3	0	0	145
WSW	0	9	18	25	45	13	8	7	3	0	0	128
W	0	21	22	17	41	18	6	1	4	0	0	130
WNW	0	23	25	15	36	8	2	2	0	0	0	111
NW	0	15	17	22	30	9	7	0	0	0	0	100
NNW	0	9	6	21	36	26	10	1	0	0	0	109
Tot	7	284	314	322	598	330	176	56	25	0	0	2112

Hours of Calm . . . . . 83  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 2197  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	2	5	0	0	0	0	0	7
NE	0	0	0	4	11	4	0	0	0	0	0	19
ENE	0	1	0	6	11	1	0	0	0	0	0	19
E	0	0	0	2	2	0	0	0	0	0	0	4
ESE	0	0	0	1	4	0	0	0	0	0	0	5
SE	0	0	0	0	1	3	0	0	0	0	0	4
SSE	0	0	0	0	2	2	0	0	0	0	0	4
S	0	0	0	0	0	6	5	3	1	0	0	15
SSW	0	0	0	0	4	14	8	7	3	0	0	36
SW	0	0	0	0	0	1	5	4	0	0	0	10
WSW	0	0	0	0	8	3	2	1	3	0	0	17
W	0	0	0	0	10	3	3	0	3	0	0	19
WNW	0	0	0	1	15	6	0	0	0	0	0	22
NW	0	0	1	2	9	4	5	0	0	0	0	21
NNW	0	0	0	1	6	5	2	0	0	0	0	14
Tot	0	1	1	17	85	57	30	15	10	0	0	216

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 218  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	2	1	0	0	0	0	0	4
NNE	0	0	0	3	2	5	2	0	0	0	0	12
NE	0	0	1	5	8	2	0	0	0	0	0	16
ENE	0	0	0	2	12	0	0	0	0	0	0	14
E	0	0	0	3	2	0	0	0	0	0	0	5
ESE	0	0	1	5	1	1	0	0	0	0	0	8
SE	0	0	2	1	2	0	0	0	0	0	0	5
SSE	0	0	0	0	2	2	0	0	0	0	0	4
S	0	1	0	1	3	0	3	1	1	0	0	10
SSW	0	0	0	1	8	6	8	1	2	0	0	26
SW	0	0	0	1	3	1	4	4	0	0	0	13
WSW	0	0	1	0	7	2	3	2	0	0	0	15
W	0	0	0	0	10	0	0	1	1	0	0	12
WNW	0	0	0	1	2	0	0	1	0	0	0	4
NW	0	0	0	4	6	1	1	0	0	0	0	12
NNW	0	0	0	3	7	0	2	0	0	0	0	12
Tot	0	1	5	31	77	21	23	10	4	0	0	172

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 172  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	2	0	0	0	0	0	0	3
NNE	0	0	2	0	4	2	1	0	0	0	0	9
NE	0	0	0	1	5	2	0	0	0	0	0	8
ENE	0	0	2	1	4	0	0	0	0	0	0	7
E	0	0	3	3	0	0	0	0	0	0	0	6
ESE	0	0	0	1	2	0	0	0	0	0	0	3
SE	0	0	2	3	3	1	0	0	0	0	0	9
SSE	0	0	1	3	4	1	0	0	0	0	0	9
S	0	0	0	2	3	6	1	0	0	0	0	12
SSW	0	0	0	1	3	4	5	0	1	0	0	14
SW	0	0	0	0	2	4	6	2	0	0	0	14
WSW	0	0	0	3	3	1	0	2	0	0	0	9
W	0	0	0	2	4	5	1	0	0	0	0	12
WNW	0	0	3	0	4	0	0	0	0	0	0	7
NW	0	0	0	3	4	1	0	0	0	0	0	8
NNW	0	0	0	3	6	3	0	0	0	0	0	12
Tot	0	0	13	27	53	30	14	4	1	0	0	142

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 142  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	2	2	3	2	1	1	0	0	0	12
NNE	0	0	6	5	14	11	2	0	0	0	0	38
NE	0	3	8	11	14	8	1	0	0	0	0	45
ENE	0	8	11	11	9	0	0	0	0	0	0	39
E	0	5	10	5	1	0	0	0	0	0	0	21
ESE	0	0	4	2	8	0	1	0	0	0	0	15
SE	0	1	1	9	9	6	0	0	0	0	0	26
SSE	0	1	1	5	12	9	0	0	0	0	0	28
S	0	0	1	0	7	13	18	10	3	0	0	52
SSW	0	0	1	1	6	21	12	2	3	0	0	46
SW	0	0	1	2	17	21	15	4	3	0	0	63
WSW	0	1	3	7	11	5	2	2	0	0	0	31
W	0	0	2	7	14	8	1	0	0	0	0	32
WNW	0	2	3	5	12	0	1	1	0	0	0	24
NW	0	2	5	4	5	3	1	0	0	0	0	20
NNW	0	0	3	5	7	15	3	1	0	0	0	34
Tot	0	24	62	81	149	122	58	21	9	0	0	526

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 526  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	3	5	7	12	1	1	0	0	0	0	29
NNE	1	6	7	6	18	1	1	0	0	0	0	40
NE	0	8	15	6	8	1	0	0	0	0	0	38
ENE	0	20	16	8	0	0	0	0	0	0	0	44
E	0	12	16	9	3	0	0	0	0	0	0	40
ESE	0	1	8	14	21	1	0	0	0	0	0	45
SE	0	0	6	16	29	10	1	0	0	0	0	62
SSE	0	0	7	6	39	20	7	3	0	0	0	82
S	0	0	6	4	34	21	7	2	0	0	0	74
SSW	0	2	2	4	8	23	17	1	1	0	0	58
SW	0	2	4	1	7	12	10	0	0	0	0	36
WSW	0	3	5	6	11	2	1	0	0	0	0	28
W	0	6	9	8	3	2	1	0	0	0	0	29
WNW	0	3	11	7	3	2	1	0	0	0	0	27
NW	0	4	4	7	5	0	0	0	0	0	0	20
NNW	0	1	1	9	9	3	3	0	0	0	0	26
Tot	1	71	122	118	210	99	50	6	1	0	0	678

Hours of Calm . . . . . 9  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 687  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	2	7	1	0	0	0	0	0	0	0	10
NNE	1	7	5	5	1	0	0	0	0	0	0	19
NE	1	9	3	1	0	0	0	0	0	0	0	14
ENE	0	17	0	0	0	0	0	0	0	0	0	17
E	0	24	19	2	0	0	0	0	0	0	0	45
ESE	0	9	12	12	4	0	0	0	0	0	0	37
SE	0	0	1	4	7	0	0	0	0	0	0	12
SSE	0	0	2	6	2	0	0	0	0	0	0	10
S	0	2	3	0	2	1	0	0	0	0	0	8
SSW	0	1	2	2	1	0	0	0	0	0	0	6
SW	0	2	2	2	0	0	1	0	0	0	0	7
WSW	0	2	6	8	5	0	0	0	0	0	0	21
W	0	4	7	0	0	0	0	0	0	0	0	11
WNW	0	12	7	1	0	0	0	0	0	0	0	20
NW	0	3	5	2	1	0	0	0	0	0	0	11
NNW	0	4	2	0	1	0	0	0	0	0	0	7
Tot	2	98	83	46	24	1	1	0	0	0	0	255

Hours of Calm . . . . . 24  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 279  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 34ft Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	13	1	0	0	0	0	0	0	0	0	14
NNE	1	9	2	1	0	0	0	0	0	0	0	13
NE	1	4	0	0	0	0	0	0	0	0	0	5
ENE	1	11	1	0	0	0	0	0	0	0	0	13
E	1	5	9	0	0	0	0	0	0	0	0	15
ESE	0	5	4	0	0	0	0	0	0	0	0	9
SE	0	3	1	0	0	0	0	0	0	0	0	4
SSE	0	2	0	0	0	0	0	0	0	0	0	2
S	0	1	0	0	0	0	0	0	0	0	0	1
SSW	0	4	0	0	0	0	0	0	0	0	0	4
SW	0	2	0	0	0	0	0	0	0	0	0	2
WSW	0	3	3	1	0	0	0	0	0	0	0	7
W	0	11	4	0	0	0	0	0	0	0	0	15
WNW	0	6	1	0	0	0	0	0	0	0	0	7
NW	0	6	2	0	0	0	0	0	0	0	0	8
NNW	0	4	0	0	0	0	0	0	0	0	0	4
Tot	4	89	28	2	0	0	0	0	0	0	0	123

Hours of Calm . . . . . 50  
Hours of Variable Direction . . . . . 0  
Hours of Valid Data . . . . . 173  
Hours of Missing Data . . . . . 11  
Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

All Stabilities

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	2	2	8	7	19	20	10	4	0	0	72
NNE	0	1	6	6	23	21	30	22	8	0	0	117
NE	0	3	4	7	30	21	38	39	4	0	0	146
ENE	0	4	8	16	41	46	31	8	0	0	0	154
E	0	2	5	8	35	33	23	14	4	0	0	124
ESE	0	4	6	4	23	18	27	21	27	0	0	130
SE	0	1	6	9	20	17	16	41	28	0	0	138
SSE	0	1	4	3	14	21	24	31	28	12	0	138
S	0	1	3	4	10	13	30	25	48	26	1	161
SSW	0	2	7	5	15	31	27	40	68	19	10	224
SW	0	1	6	3	20	25	22	36	51	17	1	182
WSW	0	2	4	5	18	26	17	14	17	7	0	110
W	0	2	4	7	28	34	14	20	13	5	2	129
WNW	0	0	2	3	23	31	30	22	5	2	1	119
NW	0	2	4	10	26	19	26	22	10	0	0	119
NNW	0	2	3	5	21	33	31	25	8	0	0	128
Tot	0	30	74	103	354	408	406	390	323	88	15	2191

Hours of Calm . . . . . 4  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 2197  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	1	0	0	0	0	1
NNE	0	0	0	0	2	0	4	1	0	0	0	7
NE	0	0	0	1	8	2	5	0	0	0	0	16
ENE	0	0	1	6	3	5	7	0	0	0	0	22
E	0	0	0	0	3	1	0	0	0	0	0	4
ESE	0	0	0	0	0	3	0	0	0	0	0	3
SE	0	0	0	0	2	1	1	2	0	0	0	6
SSE	0	0	0	0	1	1	0	1	0	0	0	3
S	0	0	0	0	0	0	5	1	5	3	0	14
SSW	0	0	0	0	0	5	8	7	10	2	3	35
SW	0	0	0	0	1	1	0	2	7	2	0	13
WSW	0	0	0	0	2	1	1	1	4	2	0	11
W	0	0	0	0	4	7	2	3	2	2	2	22
WNW	0	0	0	0	6	11	7	3	1	0	0	28
NW	0	0	0	1	5	6	4	1	4	0	0	21
NNW	0	0	0	0	3	3	2	2	0	0	0	10
Tot	0	0	1	8	40	47	47	24	33	11	5	216

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 2  
 Hours of Valid Data . . . . . 218  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	2	1	0	0	0	0	0	3
NNE	0	0	0	1	3	3	2	3	1	0	0	13
NE	0	0	0	1	6	2	5	0	0	0	0	14
ENE	0	0	1	1	7	6	1	0	0	0	0	16
E	0	0	0	0	3	1	0	0	0	0	0	4
ESE	0	0	1	0	6	1	1	0	0	0	0	9
SE	0	0	1	0	1	1	0	0	0	0	0	3
SSE	0	0	0	0	2	1	0	0	0	0	0	3
S	0	0	0	0	1	2	1	2	3	1	0	10
SSW	0	0	1	1	2	4	4	3	5	1	2	23
SW	0	0	0	0	3	4	0	3	5	2	0	17
WSW	0	0	1	0	3	3	0	1	3	1	0	12
W	0	0	0	0	6	3	1	0	1	3	0	14
WNW	0	0	0	1	1	3	1	0	0	1	0	7
NW	0	0	0	1	4	1	3	1	2	0	0	12
NNW	0	0	0	0	5	6	0	1	0	0	0	12
Tot	0	0	5	6	55	42	19	14	20	9	2	172

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 172  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	1	2	0	0	0	0	0	4
NNE	0	0	0	1	3	1	2	0	1	0	0	8
NE	0	0	2	0	2	3	2	1	0	0	0	10
ENE	0	0	0	2	2	2	1	0	0	0	0	7
E	0	0	0	2	1	0	0	0	0	0	0	3
ESE	0	1	1	2	2	1	0	0	0	0	0	7
SE	0	0	0	3	5	0	0	0	1	0	0	9
SSE	0	0	0	1	2	2	1	0	0	0	0	6
S	0	0	1	1	1	1	6	2	0	0	0	12
SSW	0	0	0	0	1	2	2	1	4	1	0	11
SW	0	0	0	0	2	0	3	6	5	1	0	17
WSW	0	0	0	1	1	2	1	0	2	0	0	7
W	0	0	0	0	5	2	1	2	3	0	0	13
WNW	0	0	1	1	2	1	0	2	0	0	0	7
NW	0	0	1	0	3	1	4	0	0	0	0	9
NNW	0	0	0	1	5	4	2	0	0	0	0	12
Tot	0	1	6	16	38	24	25	14	16	2	0	142

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 142  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	1	4	1	3	2	0	2	0	0	14
NNE	0	0	3	2	10	9	5	4	2	0	0	35
NE	0	0	1	4	6	4	8	11	3	0	0	37
ENE	0	3	3	5	13	10	5	1	0	0	0	40
E	0	2	3	3	10	7	1	0	0	0	0	26
ESE	0	0	2	1	5	3	5	0	2	0	0	18
SE	0	0	2	1	6	3	4	6	3	0	0	25
SSE	0	1	1	0	5	1	5	6	3	0	0	22
S	0	0	0	1	2	3	5	4	18	15	1	49
SSW	0	0	1	0	2	4	7	11	12	8	4	49
SW	0	0	1	1	4	6	15	17	18	5	1	68
WSW	0	0	0	0	5	10	7	0	3	3	0	28
W	0	0	0	4	6	8	5	4	5	0	0	32
WNW	0	0	1	0	3	6	6	6	0	1	1	24
NW	0	2	0	3	5	2	1	6	3	0	0	22
NNW	0	1	2	4	5	4	4	14	3	0	0	37
Tot	0	10	21	33	88	83	85	90	77	32	7	526

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 526  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	0	1	1	8	9	8	2	0	0	30
NNE	0	1	2	1	3	5	11	5	2	0	0	30
NE	0	1	0	0	2	7	14	11	0	0	0	35
ENE	0	0	1	2	10	13	11	7	0	0	0	44
E	0	0	1	1	9	12	13	5	1	0	0	42
ESE	0	1	1	0	3	10	9	3	8	0	0	35
SE	0	0	1	0	4	8	9	18	18	0	0	58
SSE	0	0	0	0	1	15	14	24	24	12	0	90
S	0	0	1	0	5	5	9	16	20	7	0	63
SSW	0	0	1	1	4	7	3	17	37	7	1	78
SW	0	0	2	1	7	4	2	8	16	6	0	46
WSW	0	1	1	2	3	7	3	7	3	1	0	28
W	0	0	1	1	4	8	1	5	2	0	0	22
WNW	0	0	0	0	9	3	8	7	3	0	0	30
NW	0	0	2	4	2	1	7	7	1	0	0	24
NNW	0	0	0	0	1	7	12	7	5	0	0	32
Tot	0	5	14	14	68	120	135	155	142	33	1	687

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 687  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	1	0	1	2	3	0	0	0	0	7
NNE	0	0	1	1	1	3	4	5	1	0	0	16
NE	0	1	1	1	1	3	4	9	0	0	0	20
ENE	0	1	1	0	6	8	3	0	0	0	0	19
E	0	0	0	1	4	8	8	6	2	0	0	29
ESE	0	0	1	1	3	0	5	14	15	0	0	39
SE	0	0	0	4	1	4	2	12	6	0	0	29
SSE	0	0	0	0	1	1	4	0	1	0	0	7
S	0	0	0	1	0	1	4	0	2	0	0	8
SSW	0	0	3	1	0	6	3	1	0	0	0	14
SW	0	0	2	0	1	5	2	0	0	1	0	11
WSW	0	1	1	0	3	2	4	4	2	0	0	17
W	0	0	2	1	1	2	3	3	0	0	0	12
WNW	0	0	0	1	0	5	7	3	0	0	0	16
NW	0	0	1	1	4	3	3	5	0	0	0	17
NNW	0	0	0	0	0	6	10	1	0	0	0	17
Tot	0	3	14	13	27	59	69	63	29	1	0	278

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 279  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Jul - Sep for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	2	1	3	5	2	0	0	0	13
NNE	0	0	0	0	1	0	2	4	1	0	0	8
NE	0	1	0	0	5	0	0	7	1	0	0	14
ENE	0	0	1	0	0	2	3	0	0	0	0	6
E	0	0	1	1	5	4	1	3	1	0	0	16
ESE	0	2	0	0	4	0	7	4	2	0	0	19
SE	0	1	2	1	1	0	0	3	0	0	0	8
SSE	0	0	3	2	2	0	0	0	0	0	0	7
S	0	1	1	1	1	1	0	0	0	0	0	5
SSW	0	2	1	2	6	3	0	0	0	0	0	14
SW	0	1	1	1	2	5	0	0	0	0	0	10
WSW	0	0	1	2	1	1	1	1	0	0	0	7
W	0	2	1	1	2	4	1	3	0	0	0	14
WNW	0	0	0	0	2	2	1	1	1	0	0	7
NW	0	0	0	0	3	5	4	2	0	0	0	14
NNW	0	1	1	0	2	3	1	0	0	0	0	8
Tot	0	11	13	13	38	33	26	30	6	0	0	170

Hours of Calm . . . . . 3  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 173  
 Hours of Missing Data . . . . . 11  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

All Stabilities

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	5	8	11	18	12	15	5	5	1	0	80
NNE	0	5	6	5	30	13	12	15	1	0	0	87
NE	0	9	10	11	20	15	11	4	0	0	0	80
ENE	0	12	13	22	9	0	0	0	0	0	0	56
E	0	13	16	11	19	0	0	0	0	0	0	59
ESE	0	4	22	17	33	9	10	1	0	0	0	96
SE	0	6	8	22	39	30	16	10	5	0	0	136
SSE	0	5	12	17	58	50	35	14	4	2	0	197
S	0	3	0	13	47	56	47	26	22	3	0	217
SSW	0	4	2	12	21	54	40	37	25	8	4	207
SW	0	3	7	2	29	43	37	12	4	1	0	138
WSW	0	4	13	26	41	18	19	20	9	17	3	170
W	0	10	25	29	25	17	16	19	19	2	0	162
WNW	0	19	28	27	43	34	42	23	13	1	0	30
NW	0	12	23	10	29	27	24	11	2	0	0	138
NNW	0	5	7	12	32	31	20	14	4	0	0	125
Tot	0	119	200	247	493	409	344	211	113	35	7	2178

Hours of Calm . . . . . 20  
 Hours of Variable Direction . . . . . 1  
 Hours of Valid Data . . . . . 2199  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	1	1	0	0	2
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	1	0	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	1	0	0	0	0	1
S	0	0	0	0	0	1	0	0	0	0	0	1
SSW	0	0	0	0	0	1	2	4	0	0	0	7
SW	0	0	0	0	0	0	1	0	0	0	0	1
WSW	0	0	0	0	0	0	1	1	0	0	0	2
W	0	0	0	0	0	0	0	2	3	0	0	5
WNW	0	0	0	0	0	1	6	6	1	0	0	14
NW	0	0	0	0	4	5	7	5	1	0	0	22
NNW	0	0	0	0	0	2	0	0	0	0	0	2
Tot	0	0	0	1	4	10	18	19	6	0	0	58

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 58  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	1	0	0	0	0	1
NNE	0	0	0	0	0	0	1	2	0	0	0	3
NE	0	0	1	0	0	0	1	0	0	0	0	2
ENE	0	0	1	0	0	0	0	0	0	0	0	1
E	0	0	0	0	1	0	0	0	0	0	0	1
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	1	0	0	0	0	0	0	1
S	0	0	0	0	1	3	4	2	0	0	0	10
SSW	0	0	0	0	0	4	1	1	0	0	0	6
SW	0	0	0	0	1	4	4	1	0	0	0	10
WSW	0	0	0	0	2	0	0	0	1	0	0	3
W	0	0	0	0	0	1	0	1	0	0	0	2
WNW	0	0	0	1	2	1	3	1	1	0	0	9
NW	0	0	1	1	2	2	3	3	0	0	0	12
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	0	3	2	10	15	18	11	2	0	0	61

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 61  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	0	1	2	1	0	3	0	0	0	8
NNE	0	0	0	0	3	0	0	0	0	0	0	3
NE	0	1	0	0	2	0	1	0	0	0	0	4
ENE	0	0	0	3	0	0	0	0	0	0	0	3
E	0	0	1	2	2	0	0	0	0	0	0	5
ESE	0	0	0	0	1	0	0	0	0	0	0	1
SE	0	0	0	0	0	1	0	0	0	0	0	1
SSE	0	0	0	0	3	1	1	0	0	0	0	5
S	0	0	0	0	4	1	1	0	0	0	0	6
SSW	0	0	0	0	3	4	3	1	0	3	1	15
SW	0	0	0	0	2	1	4	3	0	1	0	11
WSW	0	0	1	0	3	0	0	1	0	3	0	8
W	0	0	0	2	4	0	0	3	1	0	0	10
WNW	0	0	0	0	3	2	2	3	0	0	0	10
NW	0	0	0	1	0	3	1	0	0	0	0	5
NNW	0	0	0	2	3	3	1	4	0	0	0	13
Tot	0	2	2	11	35	17	14	18	1	7	1	108

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 108  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	2	5	11	9	9	2	5	1	0	45
NNE	0	2	2	4	25	8	11	12	0	0	0	64
NE	0	2	3	6	14	15	9	3	0	0	0	52
ENE	0	1	4	10	8	0	0	0	0	0	0	23
E	0	3	8	6	10	0	0	0	0	0	0	27
ESE	0	0	1	3	7	4	9	1	0	0	0	25
SE	0	1	1	3	19	16	12	8	4	0	0	64
SSE	0	1	1	0	24	33	24	12	4	2	0	101
S	0	0	0	1	10	26	17	11	9	3	0	77
SSW	0	0	0	3	11	17	19	21	16	5	3	95
SW	0	0	2	1	14	28	20	7	4	0	0	76
WSW	0	0	3	3	17	14	15	17	8	14	3	94
W	0	1	6	11	11	13	15	13	15	2	0	87
WNW	0	4	3	12	20	23	22	13	11	1	0	109
NW	0	5	4	1	11	15	10	3	1	0	0	50
NNW	0	0	4	7	22	22	19	10	4	0	0	88
Tot	0	21	44	76	234	243	211	133	81	28	6	1077

Hours of Calm . . . . . 1  
 Hours of Variable Direction . . . . . 1  
 Hours of Valid Data . . . . . 1079  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	3	3	4	5	2	5	0	0	0	0	22
NNE	0	2	3	1	2	5	0	0	0	0	0	13
NE	0	5	6	5	4	0	0	1	0	0	0	21
ENE	0	11	7	8	1	0	0	0	0	0	0	27
E	0	5	3	3	6	0	0	0	0	0	0	17
ESE	0	1	10	9	25	5	1	0	0	0	0	51
SE	0	1	2	14	14	13	4	2	1	0	0	51
SSE	0	1	7	12	26	15	9	2	0	0	0	72
S	0	1	0	8	31	25	25	13	13	0	0	116
SSW	0	1	1	5	6	22	15	10	9	0	0	69
SW	0	1	3	0	12	9	8	1	0	0	0	34
WSW	0	1	3	17	14	4	3	1	0	0	0	43
W	0	1	8	7	10	3	1	0	0	0	0	30
WNW	0	3	13	12	18	7	9	0	0	0	0	62
NW	0	3	6	7	12	2	3	0	0	0	0	33
NNW	0	3	1	3	7	4	0	0	0	0	0	18
Tot	0	43	76	115	193	116	83	30	23	0	0	679

Hours of Calm . . . . . 5  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 684  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 34ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	3	1	0	0	0	0	0	0	0	4
NNE	0	0	1	0	0	0	0	0	0	0	0	1
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	1	0	0	0	0	0	0	0	0	1
E	0	4	4	0	0	0	0	0	0	0	0	8
ESE	0	0	5	4	0	0	0	0	0	0	0	9
SE	0	1	4	4	5	0	0	0	0	0	0	14
SSE	0	2	3	5	4	1	0	0	0	0	0	15
S	0	1	0	4	1	0	0	0	0	0	0	6
SSW	0	2	1	4	1	6	0	0	0	0	0	14
SW	0	1	2	1	0	1	0	0	0	0	0	5
WSW	0	3	2	4	3	0	0	0	0	0	0	12
W	0	2	7	8	0	0	0	0	0	0	0	17
WNW	0	5	10	2	0	0	0	0	0	0	0	17
NW	0	3	9	0	0	0	0	0	0	0	0	12
NNW	0	1	2	0	0	0	0	0	0	0	0	3
Tot	0	25	54	37	14	8	0	0	0	0	0	138

Hours of Calm . . . . . 4  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 142  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds.34ft - Stability 199ft

Wind Direction Sector	Wind Speed Range (m/s)										Total	
	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0		>10.00
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	1	0	0	0	0	0	0	0	0	0	1
NE	0	1	0	0	0	0	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0	0	0	0	0	0
E	0	1	0	0	0	0	0	0	0	0	0	1
ESE	0	3	6	1	0	0	0	0	0	0	0	10
SE	0	3	1	1	1	0	0	0	0	0	0	6
SSE	0	1	1	0	0	0	0	0	0	0	0	2
S	0	1	0	0	0	0	0	0	0	0	0	1
SSW	0	1	0	0	0	0	0	0	0	0	0	1
SW	0	1	0	0	0	0	0	0	0	0	0	1
WSW	0	0	4	2	2	0	0	0	0	0	0	8
W	0	6	4	1	0	0	0	0	0	0	0	11
WNW	0	7	2	0	0	0	0	0	0	0	0	9
NW	0	1	3	0	0	0	0	0	0	0	0	4
NNW	0	1	0	0	0	0	0	0	0	0	0	1
Tot	0	28	21	5	3	0	0	0	0	0	0	57

Hours of Calm . . . . . 10  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 67  
 Hours of Missing Data . . . . . 9  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

All Stabilities

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	0	4	11	13	18	11	22	3	5	88
NNE	0	1	3	3	13	12	16	7	13	14	0	82
NE	0	0	1	9	18	11	14	12	17	7	0	89
ENE	0	1	0	7	12	24	8	2	0	2	0	56
E	0	0	1	3	13	11	6	9	5	0	0	48
ESE	0	0	1	0	4	13	21	13	27	11	0	90
SE	0	2	0	0	4	11	23	21	30	14	10	115
SSE	0	0	0	1	15	24	35	34	39	15	7	170
S	0	0	0	2	7	14	37	54	66	37	23	240
SSW	0	1	1	2	6	19	28	33	63	41	31	225
SW	0	0	2	2	10	23	21	29	47	18	2	154
WSW	0	0	3	7	7	31	19	17	29	14	23	150
W	0	1	1	5	13	9	30	19	31	26	9	144
WNW	0	1	1	3	11	18	22	38	49	30	22	195
NW	0	1	4	3	14	25	23	32	50	40	15	207
NNW	0	0	3	4	16	13	37	26	29	6	2	136
Tot	0	9	21	55	174	271	358	357	517	278	149	2189

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 1  
 Hours of Valid Data . . . . . 2190  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class A Extremely Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0	0	0	2	0	2
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	0	0	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0	0	0	1	0	1
S	0	0	0	0	0	0	0	1	0	1	0	2
SSW	0	0	0	0	0	0	1	1	3	0	0	5
SW	0	0	0	0	0	0	0	0	1	1	0	2
WSW	0	0	0	0	0	0	0	0	1	0	0	1
W	0	0	0	0	0	0	0	0	2	4	0	6
WNW	0	0	0	0	0	0	0	2	6	3	2	13
NW	0	0	0	0	0	4	1	3	5	8	2	23
NNW	0	0	0	0	0	0	2	0	0	0	0	2
Tot	0	0	0	0	1	4	4	7	18	20	4	58

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 58  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class B Moderately Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	0	0	0	1	0	1	0	2
NNE	0	0	0	0	0	0	0	0	2	0	0	2
NE	0	0	0	1	0	0	0	0	1	0	0	2
ENE	0	0	0	1	0	0	0	0	0	0	0	1
E	0	0	0	0	0	1	0	0	0	0	0	1
ESE	0	0	0	0	0	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	1	0	0	0	0	1
S	0	0	0	0	0	1	5	0	5	1	0	12
SSW	0	0	0	0	0	0	3	0	1	1	0	5
SW	0	0	0	0	0	3	2	1	3	0	0	9
WSW	0	0	0	0	0	1	0	1	0	1	0	3
W	0	0	0	0	0	1	0	0	1	0	0	2
WNW	0	0	0	1	2	0	0	0	4	1	1	9
NW	0	0	0	0	3	1	0	1	3	3	1	12
NNW	0	0	0	0	0	0	0	0	0	0	0	0
Tot	0	0	0	3	5	8	11	4	20	8	2	61

Hours of Calm . . . . . 0  
Hours of Variable Direction . . . . . 0  
Hours of Valid Data . . . . . 61  
Hours of Missing Data . . . . . 18  
Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class C Slightly Unstable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	1	0	1	0	1	2	1	0	6
NNE	0	0	0	0	0	3	0	0	0	0	0	3
NE	0	0	0	0	1	2	0	0	1	0	0	4
ENE	0	1	0	0	1	0	0	0	0	0	0	2
E	0	0	0	1	3	1	0	0	0	0	0	5
ESE	0	0	0	0	0	1	1	0	0	0	0	2
SE	0	0	0	0	0	0	0	1	0	0	0	1
SSE	0	0	0	0	1	2	0	0	1	0	0	4
S	0	0	0	0	1	2	2	2	0	0	0	7
SSW	0	0	0	0	1	2	3	2	3	0	4	15
SW	0	0	0	0	0	2	0	2	5	0	0	9
WSW	0	0	0	1	1	3	0	1	1	0	4	11
W	0	0	0	0	0	2	0	0	2	1	0	5
WNW	0	0	0	0	1	4	0	1	2	1	3	12
NW	0	0	0	0	4	0	0	1	4	2	0	11
NNW	0	0	0	0	3	1	3	0	2	1	0	10
Tot	0	1	0	3	17	26	9	11	23	6	11	107

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 107  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class D Neutral based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	3	6	6	6	4	13	1	5	44
NNE	0	1	3	2	6	7	14	2	10	12	0	57
NE	0	0	1	5	6	3	14	10	12	7	0	58
ENE	0	0	0	2	5	11	4	0	0	1	0	23
E	0	0	1	0	7	6	4	6	0	0	0	24
ESE	0	0	0	0	2	4	6	2	8	6	0	28
SE	0	2	0	0	2	2	11	10	14	12	7	60
SSE	0	0	0	1	4	11	17	20	23	10	7	93
S	0	0	0	0	1	3	14	18	21	14	10	81
SSW	0	0	0	1	3	9	7	17	22	27	16	102
SW	0	0	2	1	2	10	13	15	18	8	2	71
WSW	0	0	1	3	3	13	9	5	21	12	19	86
W	0	0	1	4	7	6	15	10	15	21	9	88
WNW	0	0	0	2	4	8	6	15	20	20	16	91
NW	0	1	4	1	2	10	6	5	22	20	12	83
NNW	0	0	1	4	8	6	18	11	27	5	2	82
Tot	0	4	14	29	68	115	164	150	246	176	105	1071

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 1  
 Hours of Valid Data . . . . . 1072  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class E Slightly Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	3	5	5	4	7	0	0	24
NNE	0	0	0	0	5	1	1	5	1	0	0	13
NE	0	0	0	3	9	6	0	2	3	0	0	23
ENE	0	0	0	4	3	12	4	2	0	1	0	26
E	0	0	0	1	2	2	1	2	4	0	0	12
ESE	0	0	0	0	2	7	13	10	15	5	0	52
SE	0	0	0	0	0	9	10	5	12	2	3	41
SSE	0	0	0	0	7	9	12	9	12	4	0	53
S	0	0	0	2	1	3	11	26	40	21	13	117
SSW	0	1	1	0	2	4	13	10	34	11	11	87
SW	0	0	0	1	3	6	4	11	18	6	0	49
WSW	0	0	1	3	3	9	7	8	6	1	0	38
W	0	1	0	1	4	0	9	6	5	0	0	26
WNW	0	1	1	0	2	3	9	11	16	5	0	48
NW	0	0	0	0	2	6	12	15	14	7	0	56
NNW	0	0	2	0	1	4	4	6	0	0	0	17
Tot	0	3	5	15	49	86	115	132	187	63	27	682

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 682  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208

Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class F Moderately Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	1	0	0	0	0	6	1	0	0	0	8
NNE	0	0	0	0	1	0	1	0	0	0	0	2
NE	0	0	0	0	0	0	0	0	0	0	0	0
ENE	0	0	0	0	1	1	0	0	0	0	0	2
E	0	0	0	0	0	1	1	1	1	0	0	4
ESE	0	0	0	0	0	0	1	1	4	0	0	6
SE	0	0	0	0	1	0	1	1	2	0	0	5
SSE	0	0	0	0	1	0	4	4	3	0	0	12
S	0	0	0	0	3	2	5	7	0	0	0	17
SSW	0	0	0	1	0	4	1	3	0	2	0	11
SW	0	0	0	0	3	1	2	0	2	3	0	11
WSW	0	0	0	0	0	5	1	1	0	0	0	7
W	0	0	0	0	0	0	4	2	4	0	0	10
WNW	0	0	0	0	2	0	6	9	0	0	0	17
NW	0	0	0	0	0	2	3	5	2	0	0	12
NNW	0	0	0	0	1	1	10	6	0	0	0	18
Tot	0	1	0	1	13	17	46	41	18	5	0	142

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 142  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208



Joint Frequency Distribution

Site: Braidwood Generating Station

Period: Months Oct - Dec for year 2007

Stability Class G Extremely Stable based on Lapse Rate

Elevations: Winds 203ft - Stability 199ft

Wind Speed Range (m/s)

Wind Direction Sector	<0.50	0.5-1.0	1.1-1.5	1.6-2.0	2.1-3.0	3.1-4.0	4.1-5.0	5.1-6.0	6.1-8.0	8.1-10.0	>10.00	Total
N	0	0	0	0	2	1	1	0	0	0	0	4
NNE	0	0	0	1	1	1	0	0	0	0	0	3
NE	0	0	0	0	2	0	0	0	0	0	0	2
ENE	0	0	0	0	1	0	0	0	0	0	0	1
E	0	0	0	1	1	0	0	0	0	0	0	2
ESE	0	0	1	0	0	1	0	0	0	0	0	2
SE	0	0	0	0	1	0	1	4	2	0	0	8
SSE	0	0	0	0	2	2	1	1	0	0	0	6
S	0	0	0	0	1	3	0	0	0	0	0	4
SSW	0	0	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	2	1	0	0	0	0	0	3
WSW	0	0	1	0	0	0	2	1	0	0	0	4
W	0	0	0	0	2	0	2	1	2	0	0	7
WNW	0	0	0	0	0	3	1	0	1	0	0	5
NW	0	0	0	2	3	2	1	2	0	0	0	10
NNW	0	0	0	0	3	1	0	3	0	0	0	7
Tot	0	0	2	4	21	15	9	12	5	0	0	68

Hours of Calm . . . . . 0  
 Hours of Variable Direction . . . . . 0  
 Hours of Valid Data . . . . . 68  
 Hours of Missing Data . . . . . 18  
 Hours in Period . . . . . 2208