

APPENDIX 2CC

Evaluation of Meteorological Data

WLS COL 2.3-1 This Appendix provides an evaluation of the second year of Lee Nuclear Station meteorological data and a comparison with the first year of meteorological data. In addition, comparison of the site data with data covering a longer period of record from the nearest local National Weather Service station demonstrates how well the site data represents the long-term conditions at the Lee Nuclear Station site. Because the one-year and two-year data sets are consistent and representative of the long-term conditions, there is no need to update the meteorological data and values currently provided in FSAR Section 2.3.

This Appendix also provides an evaluation of the use of a two year meteorological data set on atmospheric dispersion factors.

APPENDIX 2CC

EVALUATION OF METEOROLOGICAL DATA

2CC.1 Purpose

WLS COL 2.3-1 This Appendix provides an evaluation of the second year of Lee Nuclear Station meteorological data and a comparison with the first year of meteorological data. In addition, comparison of the site data with data covering a longer period of record from the nearest local National Weather Service station demonstrates how well the site data represents the long-term conditions at the Lee Nuclear Station site.

2CC.2 Data Evaluation

The second year of meteorological data was used to demonstrate how representative the first year of data (12/1/2005 - 11/30/2006) is of conditions at the site. The complete two-year data set (12/1/2005 - 11/30/2007) was used in these evaluations. Additional long-term meteorological data was obtained from the Greenville-Spartanburg (GSP) Local Climatic Data (LCD) Summary (Reference 2CC-201). The 30-year normals provided in the GSP LCD are based on data from 1971-2000. The meteorological parameters evaluated consist of temperature, relative humidity, precipitation, stability class, wind speed frequency, and wind direction frequency. Joint frequency distributions of wind speed, wind direction, and atmospheric stability for both the first year of Lee Nuclear Station site data and the complete two-year data set are also provided.

Temperature and Moisture

The first parameter considered is the site temperature. Table 2CC-201 compares temperatures from the Greenville-Spartanburg (GSP) Local Climatic Data Summary with the first year of Lee Nuclear Station data and the complete two-year Lee Nuclear Station data set. A comparison of the monthly mean dry bulb temperatures is also given in Figure 2CC-201. As seen, the annual mean daily maximum temperature is slightly higher for the two-year Lee Nuclear Station data set than for either the GSP weather station data or the Lee Nuclear Station one-year data set. Likewise, the annual mean daily minimum temperature is slightly lower for the two-year data set. It appears that Lee Nuclear Station is potentially warmer than GSP in January, early spring (March/April), and August, but cooler than GSP in May-July. The mean monthly dry bulb temperature is in good agreement between the three data sets. The annual dry bulb mean temperature is within a one-half degree (° F) temperature range for the three data sets.

Moisture content of the air can be characterized with measurements of wet bulb temperature, dew point temperature, and relative humidity. The annual wet bulb temperatures are also in good agreement. The comparison of the average wet bulb temperature for the three data sets is given in Figure 2CC-202. Table 2CC-201 shows that the annual average wet bulb temperature for GSP is within one degree (° F) of the Lee Nuclear Station wet bulb temperatures. The dew point temperatures are also in good agreement with the annual average Lee Nuclear Station dew point temperatures, being within one degree (° F) of the GSP annual average dew point temperature. Dew point temperatures are compared graphically in Figure 2CC-203. The Lee Nuclear Station wet-bulb and dew point temperatures indicate higher air moisture content at Lee Nuclear Station than at GSP potentially during the months of January, March, April, and August. These are the same months as when Lee Nuclear Station temperatures appear to trend warmer than GSP, and thus can achieve a higher capacity to hold water vapor. The Lee Nuclear Station relative humidity was calculated from the measured 10 m dry bulb temperature and dew point temperature. The comparison of the relative humidity for the three data sets is given in Figure 2CC-204. Relative humidity is not the best indicator of moisture content in the air, as can be seen by the slightly larger spread between the data sets.

However, the annual average relative humidity is consistent among the three data sets as shown in Table 2CC-201, and the data sets exhibit similar annual trends. Based on these results, it is concluded that the dry bulb temperatures, wet bulb temperatures, dew point temperatures, and relative humidity values from the Lee Nuclear Station first year data, presented in FSAR Section 2.3, are consistent with the two-year Lee Nuclear Station data set. In addition, the comparison with longer-term data from GSP demonstrates that either Lee Nuclear Station data set is sufficiently representative of long term conditions that would be expected at the Lee Nuclear Station site, allowing for typical annual variability.

Stability Class

The frequency of occurrence for each stability class was determined for the first year of Lee Nuclear Station meteorological data (12/1/2005 - 11/30/2006) and the complete two-year data set (12/1/2005 - 11/30/2007). The comparison between these data sets is shown on Figure 2CC-205. This figure shows that the percentage frequency of unstable conditions (stability classes A, B, and C) for the first year data set was around 24% and the percentage frequency for the two year data set decreased to about 22%. The percentage frequency of neutral conditions (stability class D) increased from 24.6% for the first year of data to 26.1% for the two year data set. The percentage frequency of stable conditions (stability classes E, F, and G) increased only slightly from 51.3% for the first year of data to 51.6% for the two-year data set. In summary, the complete two-year data set had slightly fewer unstable conditions and more neutral conditions than are present in the first year data set. Stable conditions are similarly represented with either the one-year or two-year data sets. The effect of these variabilities relative to atmospheric dispersion and depositions would be relatively minor.

Precipitation Comparison

The comparison of the monthly and annual precipitation totals are as expected considering the drought conditions during the 2005-2007 time period (Reference 2CC-202). As seen in Table 2CC-202, the long term annual precipitation total is 50.2 inches for GSP and the recent precipitation totals at the Lee Nuclear Station site are much less (39.7 inches for the first year data and 32.7 inches for the two-year data set). To some extent, geographical influences on the spatial distribution of precipitation may also be a factor, as GSP is located in the western side of the Carolinas piedmont region and closer to the foothills than is the Lee Nuclear Station site.

Wind Speed Frequency

The joint frequency distributions of wind speed, wind direction, and atmospheric stability for the first year of Lee Nuclear Station meteorological data set measured at the 10-m level are provided in Table 2CC-203. Table 2CC-204 provides the joint frequency distribution for all stability classes combined at the 10-m level based on the first year of Lee Nuclear Station data. The annual average wind speed based on Table 2CC-204 is 2.2 m/sec (4.9 mph).

Joint frequency distributions of wind speed, wind direction, and atmospheric stability for the complete two-year Lee Nuclear Station data set at the 10-m level are provided in Table 2CC-205. The joint frequency distribution for all stability classes combined at the 10-m level based on the two-year Lee Nuclear Station data set is given in Table 2CC-206. The annual average wind speed based on Table 2CC-206 is 2.2 m/sec (4.9 mph).

The comparison of the wind speed percentage frequency at the lower (10-m) measurement level for the first year and the two-year data set is given in Figure 2CC-206. This comparison shows that the data sets agreed very well and there is no significant difference in the wind speed percentage frequency for either period. The most common wind speed is in the 1.5 through 5.4 mph range.

The joint frequency distributions of wind speed, wind direction, and atmospheric stability for the first year of Lee Nuclear Station meteorological data set measured at the 60-m level are provided in Table 2CC-207. Table 2CC-208 provides the joint frequency distribution for all stability classes combined at the 60-m level based on the first year of Lee Nuclear Station data.

Joint frequency distributions of wind speed, wind direction, and atmospheric stability for the complete two-year Lee Nuclear Station data set at the 60-m level are provided in Table 2CC-209. The joint frequency distribution for all stability classes combined at the 60-m level based on the two-year Lee Nuclear Station data set is given in Table 2CC-210.

The wind speed percentage frequency at the upper (60-m) measurement level is also consistent between the two Lee Nuclear Station data sets. Figure 2CC-207 provides the comparison between the data sets. Comparing the first year data set with the two-year data set shows that both data sets display very similar frequencies of wind speed classes. As expected, the 60-m wind speed frequency distribution is shifted toward the higher wind speeds than are the 10-m level winds.

Wind Direction Frequency

The wind direction frequency distribution at the lower (10-m) level is given in Figure 2CC-208. This figure shows that the wind direction frequency is consistent between the two data sets. This figure also shows that there is the same prevalent NW wind direction at 10-m, and a secondary max from the SSW - SW sectors. This is also shown in the joint frequency distribution presented in Tables 2CC-204 and 2CC-206.

The wind direction frequency distribution at the upper level (60-m) is given in Figure 2CC-209. This figure shows that the wind direction is consistent between the data sets and that the prevailing wind directions at this elevation are in the SSW – SW and the NE - NNE directions. This is also shown in the joint frequency distribution presented in Tables 2CC-208 and 2CC-210.

2CC.3 Conclusion

Based on the information presented in this Appendix, it is concluded that the two-year meteorological data set is consistent with the first year data set and the nearby historic data set. The atmospheric stability class percentage frequency, wind speed frequency, and the wind direction frequency are consistent for the two data sets. These comparisons demonstrate that the first year of data is consistent with the complete two-year Lee Nuclear Station data set and is representative of longer-term conditions at the site. No anomalous behavior was observed between the first year and second year of data, or comparison to the normal conditions observed at the NWS office at Greer, SC (GSP). No changes are needed to FSAR Section 2.3 based on the collection of the second year of meteorological data.

2CC.4 Atmospheric Dispersion and Deposition

Atmospheric dispersion and deposition (X/Q and D/Q, respectively) values are developed using the combined two-year data set for both accident and normal conditions, as appropriate. For accident conditions, the Exclusion Area Boundary (EAB), Low Population Zone (LPZ), and control room X/Q values are determined using the same models and input data as in the evaluations presented in Subsection 2.3.4. The only change in the analyses is the use of the full two-year data set instead of the first year data set. This insures that changes in results can be attributable to the meteorological data alone. For normal releases, X/Q and D/Q values for the maximum individual and population within 50 miles of the Lee Nuclear Station are developed. The intent of this effort is to show that the two-year data set is compatible (e.g., there are no substantial differences in atmospheric dispersion and deposition values) with the

first year data set and that any differences are the result of normal variability in the meteorological data.

The offsite accident atmospheric dispersion values are given in Table 2CC-211 for the one-year and two-year data sets. The EAB values show that the X/Q values based on the one-year data set are higher than the values based on the two-year data set. Because the offsite doses are directly proportional to the X/Q values, EAB doses are lower using the full two-year data set. Therefore, the X/Q values presented in FSAR Subsection 2.3.4, which are based on the one-year data set, are bounding. The LPZ accident atmospheric dispersion values are also given in Table 2CC-211. The X/Q values for the one-year data set and the two-year data set are compared with the DCD X/Q values instead of with each other because the impact on margin is the important consideration. The change in margin to the DCD values becomes the figure of merit in determining if the two data sets are comparable. Examination of these results shows that for all post-accident radionuclide release periods, the largest change in margin is a 3.9% decrease for the 0-8 hour time interval. The X/Q values at the LPZ for all time intervals are well below the limits provided in Table 2.0-1 of Revision 17 of the AP1000 DCD, with the highest ratio of the site-specific X/Q to the AP1000 DCD value being 36.4%.

Atmospheric dispersion coefficients for the control room are presented in Table 2CC-212. These control room atmospheric dispersion values are more difficult to compare because of the large number of release point and receptor pairs. One of the issues with this comparison is the lack of precision in the DCD site parameters. Because the DCD values are given to only two significant figures, the Lee Nuclear Station values were necessarily rounded to two significant figures. The X/Q values for the one-year data set and the two-year data set are compared with the DCD X/Q values instead of with each other because the impact on margin is the important consideration. The change in margin to the DCD values becomes the figure of merit in determining if the two data sets are comparable. An additional complication in comparing the results is the variation in the change in margin for the time periods evaluated. The consequence of a reduction in margin (or increase in the X/Q value) at later time intervals is less significant if the majority of the radionuclide releases are earlier in the accident sequence. Review of the comparisons presented in Table 2CC-212 shows that the change in margin ranges from an increase in margin of 2.0% to a reduction in margin by 10%. Both of these extremes were for the Control Room HVAC Intake receptor location. For a loss of coolant accident, this location is not significant because the Control Room is pressurized with bottled air. The maximum increase in margin (2.0%) was for a Condenser Air Removal Stack release point and the maximum decrease in margin (10%) was for a Passive Containment Cooling System (PCS) Air Diffuser release. It should be noted that even with the 10% decrease in margin for the PCS Air Diffuser release, the X/Q value for this time interval is still only 66.3% of the DCD X/Q value. The X/Q value for a Plant Vent release to the Control Room HVAC Intake receptor resulted in the smallest margin to the DCD value at 66.7% during the 0-2 hour time interval. In this case, the one-year data set and two-year data set produced identical results.

The design-basis accident X/Q values generated from the two-year meteorological data bound the one-year X/Q values; therefore, the accident meteorological dispersion parameters presented in FSAR Section 2.3.4 are based on the two-year data.

The final category of X/Q and D/Q values to be compared are for normal releases. This category includes X/Q and D/Q values for the maximum individual and the 50 mi. population. The maximum individual and population X/Q and D/Q values were calculated using essentially the same data, assumptions, and parameters as used in the original calculations using one year of data. However, the discrete receptor locations used in the maximum individual dose comparisons were updated using the 2008 land use information.

The doses for the one-year data set and the two-year data set are compared with the 10 CFR 50 Appendix I limits instead of with each other because the impact on margin is the important consideration. The greatest decrease in margin is 1.6% for the maximum individual total body dose limit of 5 mrem/yr. The comparison of the population doses within 50 miles of the site are given in Table 2CC-221. These results show that the whole body and thyroid population doses increase by 3.8% and 2.5%, respectively. The maximum increase for any organ is 5.1% to the bone. None of these increases are considered significant. Therefore, the site-specific long-term X/Q and D/Q values provided in FSAR Section 2.3.5 are based on the first year of data only.

2CC.5 Conclusion

Based on the information presented in Subsection 2CC.4, it is concluded that the atmospheric dispersion and deposition (X/Q and D/Q) values based on the two-year meteorological data set are consistent with the corresponding values based on the first year data set. The atmospheric dispersion (X/Q) values for the EAB, LPZ, and control room are consistent for the two data sets. The offsite doses due to normal gaseous effluent releases used to compare the normal atmospheric dispersion and deposition (X/Q and D/Q) values are also consistent for the two data sets. These comparisons demonstrate that the first year of data is consistent with the complete two-year Lee Nuclear Station data set and is representative of longer-term conditions at the site. No anomalous behavior was observed between the first year and second year of data. The accident meteorological dispersion parameters presented in FSAR Section 2.3.4 are based on the two-year data. The site-specific long-term X/Q and D/Q values provided in FSAR Section 2.3.5 are based on the first year of data only.

References:

- 2CC-201 National Climatic Data Center (NCDC) Local Climatic Data Annual Summary with Comparative Data, Greenville–Spartanburg (Greer), South Carolina (Station ID GSP), 2007.
- 2CC-202 South Carolina State Climatology Office, Regional Drought Monitor, <https://www.dnr.sc.gov/drought/>, accessed 10/22/2008.

TABLE 2CC-201
TEMPERATURE AND HUMIDITY COMPARISON

Temperature (°F)	POR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Mean Daily Maximum (GSP LCD)	45.0	51.1	54.7	63.6	72.3	79.3	85.5	88.6	87.3	81.3	71.9	62.5	53.5	71.0
Mean Daily Maximum (Lee 1-yr)		57.7	53.6	62.7	76.0	77.1	84.6	87.9	87.4	78.1	68.8	62.9	51.5	70.7
Mean Daily Maximum (Lee 2-yr)		55.6	52.7	65.7	73.2	77.7	83.9	86.6	91.0	81.4	72.2	62.8	55.1	71.5
Mean Daily Minimum (GSP LCD)	45.0	31.2	33.1	40.3	48.0	56.5	64.4	68.7	67.8	61.4	49.6	40.5	33.7	49.6
Mean Daily Minimum (Lee 1-yr)		37.3	33.5	41.1	51.9	54.9	63.7	68.7	69.8	61.6	47.9	39.9	30.7	50.1
Mean Daily Minimum (Lee 2-yr)		36.0	30.4	44.4	46.1	53.2	58.3	61.2	71.7	62.2	54.1	37.1	34.9	49.1
Mean Dry Bulb (GSP LCD)	45.0	41.1	43.9	52.0	60.1	67.9	75.1	78.7	77.6	71.4	60.7	51.5	43.6	60.3
Mean Dry Bulb (Lee 1-yr)		47.1	43.6	52.2	64.0	65.8	73.6	77.7	77.5	69.1	57.7	50.8	40.5	60.0
Mean Dry Bulb (Lee 2-yr)		45.7	42.3	54.5	61.4	66.2	72.7	75.9	79.8	71.2	61.1	50.1	43.4	60.4
Mean Wet Bulb (GSP LCD)	24.0	36.5	38.7	44.7	51.6	60.2	67.3	70.8	70.2	64.2	54.6	45.8	38.3	53.6
Mean Wet Bulb (Lee 1-yr)		43.6	38.8	45.7	56.2	59.5	67.0	71.5	72.2	64.4	53.1	46.1	37.0	54.6
Mean Wet Bulb (Lee 2-yr)		41.9	37.3	47.7	53.7	59.3	66.2	69.4	72.6	64.9	56.1	45.0	39.5	54.5
Mean Dew Point (GSP LCD)	24.0	30.3	32.4	38.1	45.8	56.3	64.2	68.2	67.8	61.3	50.7	41.1	32.7	49.1
Mean Dew Point (Lee 1-yr)		37.4	29.1	35.7	48.4	54.6	63.3	68.6	69.9	61.7	48.3	40.0	30.4	48.9
Mean Dew Point (Lee 2-yr)		34.9	25.9	37.8	44.7	53.8	62.6	66.2	69.2	61.0	51.6	37.7	32.5	48.1
Humidity (%)														
Normal Humidity (GSP LCD)	30.0	67.0	64.0	63.0	62.0	69.0	72.0	73.0	76.0	75.0	71.0	70.0	68.0	69.0
Average Humidity (Lee 1-yr)		71.9	61.8	58.4	62.6	71.2	74.0	76.7	79.9	79.6	74.9	70.6	71.5	71.1
Average Humidity (Lee 2-yr)		70.3	58.0	58.2	60.1	69.0	74.3	75.0	73.9	73.7	74.8	67.0	70.1	68.7

NOTE: POR is the period of record for the GSP data set.

TABLE 2CC-202
PRECIPITATION COMPARISON

		Precipitation (in)												
	POR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Normal (GSP LCD)	30	4.41	4.24	5.31	3.54	4.59	3.92	4.65	4.08	3.97	3.88	3.79	3.86	50.2
Lee (1-yr)		3.71	1.05	1.09	2.34	2.67	4.89	3.69	4.3	2.89	3.47	4.63	4.99	39.7
Lee (2-yr)		3.59	1.94	2.59	3.21	1.88	3.75	2.2	2.6	1.83	2.76	2.64	3.8	32.7

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class A HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	0	0	0	0	2	5	10	6	7	2	2	0	35
NNE	0	0	0	0	0	7	11	16	3	1	2	0	40
NE	0	0	0	0	0	13	29	16	2	1	0	0	61
ENE	0	0	0	1	3	8	24	16	3	0	0	0	55
E	0	0	0	1	1	8	22	3	0	0	0	0	35
ESE	0	0	0	1	3	15	10	0	0	0	0	0	29
SE	0	0	0	2	1	13	19	3	0	0	0	0	38
SSE	0	0	0	1	3	15	30	11	2	0	2	0	64
S	0	0	0	0	2	13	22	15	3	3	1	0	59
SSW	0	0	0	0	3	8	24	35	20	16	5	2	113
SW	0	0	0	0	1	1	16	33	21	25	11	2	110
WSW	0	0	0	0	2	3	12	26	12	7	2	0	65
W	0	0	0	1	0	3	6	2	10	1	0	0	24
WNW	0	0	1	0	4	2	11	8	10	6	10	3	57
NW	0	0	0	0	1	2	11	6	8	9	9	1	49
NNW	0	0	0	0	0	4	6	5	2	4	0	0	22
Calm	0												0
Total	0	0	1	7	27	122	264	201	105	76	46	8	857

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class B HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	0	0	0	1	1	4	5	12	10	1	0	0	35
NNE	0	0	0	0	0	8	13	7	4	3	1	0	37
NE	0	0	0	0	3	15	10	9	3	1	0	0	41
ENE	0	0	0	2	7	3	15	5	0	0	0	0	32
E	0	0	0	2	0	6	11	1	0	0	0	0	21
ESE	0	0	0	0	2	3	7	1	0	0	0	0	13
SE	0	0	0	1	0	8	6	0	0	0	0	0	16
SSE	0	0	0	2	4	7	13	1	0	0	1	0	29
S	0	0	0	1	4	8	17	6	0	1	0	0	37
SSW	0	0	0	0	0	3	13	16	15	7	3	2	59
SW	0	0	0	0	0	4	13	21	23	16	7	1	85
WSW	0	0	0	0	0	4	16	19	9	6	5	0	59
W	0	0	0	0	1	0	7	7	4	5	1	0	26
WNW	0	0	0	0	0	4	10	8	6	7	5	3	45
NW	0	0	0	0	1	9	12	5	3	9	3	0	44
NNW	0	0	1	1	1	0	4	4	5	2	0	1	20
Calm	0												0
Total	0	0	1	10	25	88	175	123	83	59	27	7	599

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
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3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class C HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	0	0	1	1	2	7	10	2	4	1	1	0	30
NNE	0	0	0	0	3	2	11	10	5	3	0	0	35
NE	0	0	0	2	3	12	21	7	3	0	0	0	49
ENE	0	0	0	2	3	6	12	7	1	0	0	0	32
E	0	0	0	0	1	10	2	2	0	0	0	0	16
ESE	0	0	0	0	2	8	6	1	0	0	0	0	18
SE	0	0	0	3	4	16	10	0	0	0	0	0	33
SSE	0	0	0	0	5	13	18	5	0	1	0	0	42
S	0	0	1	0	2	5	24	4	2	3	0	0	41
SSW	0	0	0	0	0	2	21	12	10	5	4	1	56
SW	0	0	1	0	2	3	18	17	11	4	16	7	79
WSW	0	0	0	1	3	5	24	15	7	4	0	2	61
W	0	0	0	1	1	2	11	4	2	1	2	0	25
WNW	0	0	0	3	0	1	10	9	5	3	4	1	37
NW	0	0	0	0	0	9	16	4	4	6	2	0	41
NNW	0	0	0	1	0	2	9	5	1	4	0	1	24
Calm	0												0
Total	0	0	3	15	32	106	224	106	57	36	29	12	620

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class D HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	0	0	6	8	16	25	59	32	17	9	2	0	174
NNE	0	0	7	8	15	27	78	52	24	6	2	0	219
NE	0	0	4	7	12	26	65	34	11	5	1	0	167
ENE	0	1	9	18	12	25	40	20	5	1	0	0	132
E	0	0	9	7	10	18	22	7	2	0	0	0	76
ESE	0	1	9	6	15	24	12	2	0	1	0	0	70
SE	0	0	4	10	26	32	25	2	5	0	0	0	105
SSE	1	0	6	8	16	36	52	6	8	3	4	3	144
S	0	0	6	5	21	48	64	25	12	3	5	0	190
SSW	0	0	5	3	7	23	79	38	34	17	2	0	208
SW	0	1	3	4	9	17	48	39	27	26	16	1	191
WSW	0	0	3	5	3	17	27	20	16	5	10	3	109
W	0	0	3	6	3	10	19	12	6	3	1	0	64
WNW	0	2	4	6	7	9	18	13	13	6	7	3	90
NW	0	1	6	10	22	26	34	16	15	10	4	5	149
NNW	0	1	6	10	13	25	31	22	10	9	2	1	132
Calm	0												0
Total	1	7	93	124	207	386	672	341	206	106	57	17	2218

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class E HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	0	4	22	12	17	27	18	7	2	2	1	0	112
NNE	0	3	10	12	21	16	11	6	1	0	0	0	81
NE	0	5	15	20	18	20	16	7	1	0	0	0	100
ENE	0	6	21	6	15	15	8	0	0	0	0	0	70
E	0	6	22	23	21	18	3	0	0	0	0	0	92
ESE	0	3	21	21	18	13	3	1	0	0	0	0	80
SE	0	0	19	23	27	25	16	0	0	0	0	0	109
SSE	0	0	7	19	27	32	23	5	1	1	0	0	115
S	0	0	5	9	15	44	66	25	0	0	0	0	164
SSW	0	2	3	12	9	12	42	25	21	8	0	0	136
SW	0	1	6	8	3	16	27	30	27	9	2	0	129
WSW	0	0	5	10	2	19	25	18	10	3	0	0	92
W	0	2	7	3	2	13	20	11	2	0	0	0	61
WNW	0	0	9	16	19	28	39	11	7	4	0	0	134
NW	0	1	9	34	38	41	40	24	6	0	1	0	196
NNW	0	5	21	18	27	29	32	24	3	0	1	0	160
Calm	5												5
Total	5	39	202	247	277	367	390	195	82	28	5	0	1836

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class F HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	1	10	20	9	7	3	3	0	0	0	0	0	54
NNE	1	9	13	5	5	5	1	0	0	0	0	0	40
NE	1	11	9	8	7	3	0	0	0	0	0	0	40
ENE	1	10	21	13	5	0	1	0	0	0	0	0	52
E	0	7	30	15	5	2	0	0	0	0	0	0	59
ESE	1	10	20	25	6	3	0	0	0	0	0	0	65
SE	0	1	15	16	18	15	3	0	0	0	0	0	66
SSE	0	3	6	13	16	12	7	0	1	0	0	0	59
S	1	1	7	3	6	7	18	2	0	0	0	0	46
SSW	0	0	5	3	5	3	8	2	0	1	0	0	28
SW	0	0	2	3	6	6	1	0	0	0	0	0	19
WSW	0	2	7	6	1	6	6	0	0	0	0	0	29
W	0	3	4	1	3	3	4	1	0	0	0	0	20
WNW	0	5	22	13	17	26	27	2	1	0	0	0	113
NW	1	5	28	34	50	48	36	3	0	0	0	0	205
NNW	0	5	22	20	19	10	8	2	0	0	0	0	86
Calm	5												5
Total	12	85	231	189	176	153	124	12	2	1	0	0	986

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-203
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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Stability Class G HRS

Dir	Wind Speed (m/sec)												Total
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10	
N	3	23	37	20	2	1	0	0	0	0	0	0	86
NNE	2	32	17	8	1	0	0	0	0	0	0	0	60
NE	2	25	26	5	4	0	1	0	0	0	0	0	63
ENE	3	25	36	7	1	0	0	0	0	0	0	0	73
E	4	19	39	18	17	2	0	0	0	0	0	0	98
ESE	3	12	40	25	13	2	0	0	0	0	0	0	96
SE	1	21	41	19	12	9	2	0	0	0	0	0	106
SSE	1	6	17	11	8	4	0	0	0	0	0	0	48
S	0	7	2	3	2	1	1	0	0	0	0	0	17
SSW	0	0	2	1	1	2	1	0	0	0	0	0	7
SW	0	2	2	1	0	1	0	0	0	0	0	0	6
WSW	0	4	5	2	1	0	0	0	0	0	0	0	12
W	0	2	8	8	3	1	3	0	0	0	0	0	26
WNW	2	10	20	21	28	44	27	1	0	0	0	0	152
NW	4	23	60	83	121	180	90	0	0	0	0	0	561
NNW	2	26	58	51	23	9	1	0	0	0	0	0	170
Calm	63												63
Total	91	237	411	283	238	257	126	1	0	0	0	0	1645

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-204
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
(ALL STABILITY CLASSES COMBINED)
10-M MEASUREMENT LEVEL

Dir	Wind Speed (m/sec)												Total	Mean Speed
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U <10		
N	4	37	86	52	47	73	106	60	40	16	6	0	526	2.1
NNE	3	45	48	34	45	65	126	91	37	13	5	0	513	2.3
NE	3	41	54	42	48	89	142	74	21	7	1	0	522	2.1
ENE	4	42	87	50	47	57	100	48	9	1	0	0	445	1.7
E	4	32	100	65	55	64	60	13	2	0	0	0	397	1.4
ESE	4	27	90	78	59	68	39	5	0	1	0	0	372	1.3
SE	1	22	79	74	88	118	81	5	5	0	0	0	472	1.5
SSE	2	9	36	55	79	120	143	29	12	5	7	3	501	2.0
S	1	8	22	22	52	126	211	77	18	10	6	0	553	2.3
SSW	0	2	16	20	26	54	189	128	99	54	15	5	607	3.2
SW	0	4	15	17	22	48	122	140	109	80	52	11	618	3.7
WSW	0	6	21	25	12	54	110	96	55	26	18	5	428	3.1
W	0	7	23	21	13	33	70	38	25	10	4	0	246	2.6
WNW	2	18	56	59	75	114	143	54	44	27	27	10	628	2.5
NW	5	30	104	162	233	316	240	58	36	35	20	6	1245	2.0
NNW	2	37	108	100	83	80	92	62	22	20	3	3	612	1.9
Calm	74												74	
Total	36	369	943	874	982	1479	1976	979	535	306	164	45	8760	2.2

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS A HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	0	0	0	0	1	3	5	4	6	2	1	0	0	22
NNE	0	0	0	0	0	4	7	11	3	2	1	0	0	27
NE	0	0	0	0	0	7	17	16	2	1	0	0	0	43
ENE	0	0	0	1	2	5	14	16	4	1	0	0	0	41
E	0	0	0	1	1	4	13	3	0	0	0	0	0	21
ESE	0	0	0	1	2	8	9	1	0	0	0	0	0	19
SE	0	1	0	1	1	7	18	7	0	0	0	0	0	34
SSE	0	0	0	1	2	10	21	11	1	0	1	0	0	46
S	0	1	0	0	1	7	18	14	3	2	1	0	0	45
SSW	0	0	0	0	2	5	17	32	21	9	5	1	0	91
SW	0	0	0	0	1	1	12	29	19	17	14	2	0	94
WSW	0	0	0	0	1	2	7	19	15	6	9	2	0	60
W	0	0	0	1	0	2	5	4	9	2	1	0	0	22
WNW	0	0	1	0	2	1	7	9	9	8	8	3	1	48
NW	0	0	0	1	1	2	6	7	8	8	8	1	2	43
NNW	0	0	0	0	0	2	4	6	1	3	0	0	0	16
CALM	0													0
TOTAL	0	1	1	4	14	67	180	188	100	59	47	8	2	672

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS B HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	0	0	0	1	1	3	4	8	8	2	0	0	0	27
NNE	0	0	0	0	0	5	10	8	5	4	1	0	0	33
NE	0	0	0	1	2	8	10	15	4	2	0	0	0	41
ENE	0	0	0	1	4	3	12	17	2	1	1	0	0	39
E	0	0	0	1	0	4	12	3	1	0	0	0	0	22
ESE	0	0	0	0	1	4	9	1	0	0	0	0	0	14
SE	0	0	1	1	1	6	11	1	0	0	0	0	0	19
SSE	0	0	0	1	2	7	17	1	0	0	1	0	0	29
S	0	0	0	1	2	6	24	6	1	1	0	0	0	40
SSW	0	0	0	0	0	2	20	20	13	6	3	1	0	66
SW	0	0	0	0	0	3	17	17	19	13	9	1	1	79
WSW	0	0	0	0	0	4	14	20	8	6	5	1	0	58
W	0	0	0	0	1	1	10	7	6	4	1	0	0	30
WNW	0	0	0	0	1	3	9	7	4	5	4	4	0	37
NW	0	0	0	0	1	5	16	8	5	5	4	2	1	46
NNW	0	0	1	1	1	0	4	4	4	2	0	1	0	16
CALM	0													0
TOTAL	0	0	1	6	14	62	200	142	82	51	28	9	1	596

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS C HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	0	0	1	2	2	5	8	5	3	1	1	0	0	25
NNE	0	0	0	0	2	3	12	11	8	2	0	0	0	37
NE	0	0	0	1	3	8	24	12	5	2	0	0	0	55
ENE	0	0	0	1	2	7	17	11	3	0	1	0	0	41
E	0	0	0	0	1	11	11	2	1	0	0	0	0	26
ESE	0	0	0	0	2	6	6	1	0	0	0	0	0	15
SE	0	0	0	2	4	15	18	0	0	0	0	0	0	39
SSE	0	0	0	2	4	16	25	3	0	1	0	0	0	52
S	0	0	1	1	1	7	28	5	2	2	0	0	0	45
SSW	0	0	0	0	1	5	23	17	11	5	5	1	0	69
SW	0	0	1	1	1	4	21	14	11	6	15	4	0	78
WSW	0	0	0	1	3	6	25	12	7	4	2	2	1	61
W	0	0	1	1	2	4	12	6	2	1	1	0	0	30
WNW	0	0	0	2	1	7	9	6	3	2	3	2	0	33
NW	0	0	0	0	1	7	13	5	5	4	7	3	1	44
NNW	0	0	0	1	0	3	8	4	1	3	0	1	0	20
CALM	0													0
TOTAL	0	0	2	12	27	113	263	113	60	30	34	12	1	669

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS D HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	0	0	7	9	17	31	59	20	20	8	3	0	0	173
NNE	0	1	6	9	15	44	79	41	21	6	1	0	0	221
NE	0	1	5	7	13	32	74	33	14	6	1	0	0	186
ENE	0	1	7	13	16	30	55	24	5	3	0	0	0	154
E	0	2	10	9	16	20	24	6	2	0	0	0	0	88
ESE	0	1	8	7	15	26	18	4	0	1	0	0	0	79
SE	0	2	3	10	25	41	37	5	5	1	0	0	0	127
SSE	1	1	4	8	18	43	48	6	5	2	3	2	0	140
S	1	1	4	4	19	43	59	25	11	3	4	1	0	173
SSW	0	0	5	3	8	25	74	48	34	15	2	2	0	215
SW	0	1	4	5	9	19	43	37	32	28	14	1	0	192
WSW	0	0	3	7	5	15	29	23	16	8	7	3	0	114
W	0	1	4	5	4	13	22	12	6	4	1	0	0	71
WNW	0	2	4	5	8	12	21	11	12	9	7	4	0	95
NW	0	1	7	9	14	30	32	16	19	14	15	7	0	164
NNW	0	2	8	10	17	21	30	22	14	10	4	2	1	141
CALM	3													3
TOTAL	4	12	89	121	217	445	704	334	215	115	60	19	1	2335

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS E HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	0	4	18	16	18	24	22	9	2	2	1	0	0	115
NNE	1	5	13	12	18	20	25	15	1	0	0	0	0	110
NE	1	4	17	14	19	19	21	9	2	0	0	0	0	105
ENE	1	7	13	9	14	16	19	2	1	0	0	0	0	80
E	0	6	21	19	16	17	9	1	0	0	0	0	0	88
ESE	0	4	17	22	16	15	7	1	0	0	0	0	0	81
SE	0	2	16	19	23	25	12	2	1	0	0	0	0	98
SSE	1	1	10	19	23	36	21	6	3	1	1	0	0	122
S	0	2	6	12	20	43	69	20	1	0	1	0	0	174
SSW	0	2	4	11	10	15	55	29	14	5	0	0	0	145
SW	0	2	4	5	5	16	27	27	23	7	2	0	0	117
WSW	0	1	4	6	5	14	17	14	7	2	0	0	0	69
W	0	2	6	2	5	11	19	10	2	0	0	0	0	57
WNW	0	0	8	12	14	23	30	12	6	3	0	0	0	109
NW	1	3	15	30	33	39	36	20	4	0	1	0	0	181
NNW	1	4	15	16	24	29	28	17	5	1	1	0	0	139
CALM	6													6
TOTAL	9	47	186	225	262	360	418	193	69	21	5	0	0	1795

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS F HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	2	8	16	10	6	6	4	0	0	0	0	0	0	50
NNE	1	9	15	7	9	5	2	0	0	0	0	0	0	48
NE	1	10	15	7	6	7	1	1	0	0	0	0	0	46
ENE	1	9	18	10	4	1	1	0	0	0	0	0	0	44
E	0	10	29	12	4	2	0	0	0	0	0	0	0	57
ESE	1	9	22	20	6	3	1	0	0	0	0	0	0	60
SE	0	4	16	15	18	10	3	1	0	0	0	0	0	67
SSE	0	3	8	16	14	12	6	0	1	0	0	0	0	59
S	1	1	6	5	9	11	16	3	0	0	0	0	0	52
SSW	0	0	5	3	5	4	11	3	0	1	0	0	0	31
SW	0	1	2	3	5	5	2	0	0	0	0	0	0	17
WSW	0	2	5	5	1	4	4	1	0	0	0	0	0	20
W	0	2	6	3	6	6	5	1	1	0	0	0	0	30
WNW	0	4	16	12	15	25	18	2	1	0	0	0	0	92
NW	1	8	23	25	43	53	34	2	0	0	1	0	0	189
NNW	0	9	24	16	16	11	10	2	0	0	0	0	0	89
CALM	17													17
TOTAL	23	88	223	170	164	166	117	14	3	1	1	0	0	968

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-205
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
10-M MEASUREMENT LEVEL
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STABILITY CLASS G HRS

DIR	Wind Speed (m/sec)													TOTAL
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12	
N	4	25	34	14	4	2	1	0	0	0	0	0	0	83
NNE	4	29	19	7	3	3	1	0	0	0	0	0	0	65
NE	2	23	21	4	4	1	1	0	0	0	0	0	0	55
ENE	4	21	30	6	2	1	0	0	0	0	0	0	0	63
E	3	21	42	12	11	2	1	0	0	0	0	0	0	92
ESE	3	23	38	21	9	2	0	0	0	0	0	0	0	96
SE	1	21	37	17	11	6	2	0	0	0	0	0	0	94
SSE	1	9	12	9	7	4	2	0	0	0	0	0	0	44
S	0	8	3	2	1	1	2	0	0	0	0	0	0	17
SSW	1	1	2	1	2	2	1	0	0	0	0	0	0	8
SW	0	2	3	2	2	1	0	0	0	0	0	0	0	8
WSW	0	3	5	2	1	0	0	0	0	0	0	0	0	10
W	1	4	9	6	3	4	3	0	0	0	0	0	0	29
WNW	4	13	19	20	24	42	31	1	0	0	0	0	0	153
NW	4	25	56	86	128	214	118	0	0	0	0	0	0	631
NNW	3	32	59	47	30	10	3	1	0	0	0	0	0	184
CALM	94													94
TOTAL	125	260	387	256	241	292	162	2	0	0	0	0	0	1726

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-206
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
(ALL STABILITY CLASSES COMBINED)
10-M MEASUREMENT LEVEL

Dir	Wind Speed (m/sec)													Total	Mean Speed
	0.45<U ≤0.5	0.5<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	10<U ≤12		
N	5	37	74	51	47	73	103	46	39	15	5	0	0	495	2.1
NNE	5	44	52	36	46	84	136	85	38	14	3	0	0	542	2.2
NE	3	37	57	33	46	82	149	86	27	9	1	0	0	530	2.2
ENE	6	37	68	41	43	62	117	69	15	4	1	0	0	462	2.0
E	3	39	101	55	48	59	71	15	3	0	0	0	0	394	1.5
ESE	4	37	85	71	49	62	49	6	0	1	0	0	0	364	1.4
SE	1	28	72	64	82	110	101	15	5	1	0	0	0	479	1.6
SSE	2	13	35	55	70	129	140	28	10	4	5	2	0	492	2.0
S	1	12	20	25	53	118	215	71	17	7	5	1	0	544	2.3
SSW	1	3	15	17	28	57	201	150	93	41	15	5	0	624	3.2
SW	0	5	12	16	22	48	122	123	105	70	54	8	1	585	3.7
WSW	0	5	16	20	15	43	96	89	53	25	23	7	1	393	3.3
W	1	8	25	18	19	40	77	41	25	10	4	0	0	268	2.5
WNW	4	18	47	51	64	113	125	48	34	27	21	12	1	567	2.5
NW	5	37	101	151	219	350	254	58	41	31	35	12	3	1296	2.1
NNW	3	47	107	90	88	76	86	56	25	19	4	3	1	604	1.9
Calm	120													120	
Total	42	408	888	794	940	1506	2044	986	528	276	175	48	5	8760	2.2

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
Page 1 of 7

Stability Class A HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	0	0	1	1	7	9	5	5	4	3	2	0	37
NNE	0	0	0	0	0	3	10	8	9	2	3	2	0	37
NE	0	0	0	0	2	6	15	25	14	0	2	1	0	66
ENE	0	0	0	1	1	4	22	17	10	3	1	0	0	59
E	0	0	0	3	1	8	16	3	1	0	0	0	0	32
ESE	0	0	0	1	2	8	12	2	0	0	0	0	0	25
SE	0	0	0	1	2	12	18	2	1	1	0	0	0	37
SSE	0	0	0	1	5	10	19	13	11	2	0	1	1	64
S	0	0	0	2	1	4	18	17	12	1	4	1	1	61
SSW	0	0	0	0	1	3	18	22	25	24	19	4	1	118
SW	0	0	0	0	3	2	12	16	21	14	30	8	2	109
WSW	0	0	0	0	0	1	6	9	13	14	10	3	0	56
W	0	0	1	0	2	3	5	6	4	9	0	2	0	32
WNW	0	0	0	1	1	1	6	8	6	9	12	6	3	53
NW	0	0	1	0	0	1	11	5	5	2	10	9	1	45
NNW	0	0	0	0	1	3	7	1	4	4	9	0	0	29
Calm	0													0
Total	0	0	2	11	23	77	206	160	142	90	104	39	9	863

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class B HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	1	0	0	0	7	5	8	13	5	5	0	0	44
NNE	0	0	0	0	1	4	4	15	6	4	4	1	0	39
NE	0	0	0	1	5	10	9	11	6	2	2	0	0	46
ENE	0	0	0	1	2	1	14	5	6	0	0	0	0	29
E	0	0	0	0	1	2	10	2	1	0	0	0	0	16
ESE	0	0	0	1	1	3	6	4	0	0	0	0	0	15
SE	0	0	0	0	1	3	11	2	0	0	0	0	0	17
SSE	0	0	0	3	3	7	14	3	1	1	0	0	0	32
S	0	0	1	0	3	2	12	11	1	3	0	0	0	33
SSW	0	0	0	1	0	5	7	15	21	8	6	2	1	67
SW	0	0	0	0	0	4	12	15	19	11	18	4	3	87
WSW	0	0	0	0	0	1	5	13	8	10	10	5	0	52
W	0	0	0	0	0	4	5	5	5	3	6	1	0	29
WNW	0	0	0	0	0	3	8	6	5	4	6	6	3	41
NW	0	0	0	0	0	2	17	11	2	3	8	3	1	47
NNW	0	0	0	0	0	2	2	5	3	2	2	0	0	16
Calm	0													0
Total	0	1	1	7	17	60	142	132	98	56	68	22	8	613

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class C HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	0	1	1	2	3	5	13	1	6	2	1	0	35
NNE	0	0	0	1	2	3	5	11	4	4	6	1	0	37
NE	0	0	0	1	2	11	16	15	7	2	4	0	0	58
ENE	0	0	0	1	0	2	11	7	3	2	1	0	0	27
E	0	0	0	1	0	7	3	1	2	0	0	0	0	14
ESE	0	0	0	0	2	3	9	0	0	1	0	0	0	15
SE	0	0	1	1	2	9	12	2	0	0	0	0	0	27
SSE	0	0	0	1	2	8	16	6	6	1	1	0	1	42
S	0	0	1	1	0	4	20	8	3	1	2	0	0	40
SSW	0	0	0	0	0	2	13	17	8	14	7	2	1	65
SW	0	0	2	0	0	3	12	17	8	8	13	10	8	82
WSW	0	0	0	0	1	3	10	15	10	5	7	5	2	58
W	0	0	0	1	2	0	9	5	3	1	2	1	0	24
WNW	0	0	0	1	0	1	6	5	7	3	5	3	1	32
NW	0	0	0	0	1	4	14	7	4	2	6	2	0	40
NNW	0	0	1	0	0	3	9	5	2	1	6	1	3	31
Calm	0													0
Total	0	0	6	10	16	67	171	135	69	51	63	26	16	630

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class D HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	0	3	2	5	14	37	36	19	20	15	4	0	156
NNE	0	0	1	4	5	15	30	43	58	34	28	5	0	225
NE	0	0	0	1	3	16	43	59	41	24	14	2	1	206
ENE	0	1	2	5	2	13	24	25	21	8	5	0	0	107
E	0	0	0	7	8	6	24	14	8	2	1	0	0	71
ESE	0	1	2	4	2	10	17	11	3	1	0	0	0	51
SE	0	0	3	5	6	19	25	15	2	1	4	0	0	81
SSE	0	0	6	2	10	18	30	32	20	10	11	2	4	146
S	0	0	7	3	10	24	62	27	19	12	12	4	1	182
SSW	0	1	1	4	3	17	47	48	34	28	27	4	0	216
SW	0	0	1	4	8	7	35	31	30	33	45	14	0	210
WSW	0	0	2	1	3	5	15	24	21	19	10	12	4	117
W	0	0	1	4	4	7	14	8	8	4	7	0	0	57
WNW	0	1	1	5	8	13	11	10	9	11	10	5	2	87
NW	0	0	4	5	10	12	26	13	10	14	21	6	6	128
NNW	0	0	3	2	7	12	28	19	13	12	14	5	1	117
Calm	1													1
Total	1	4	37	58	95	210	472	418	319	235	226	64	19	2157

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class E HRS

Dir	Wind Speed (m/sec)												U>10	Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10		
N	0	0	2	1	6	11	33	25	15	5	5	1	1	106
NNE	0	1	0	3	4	12	47	33	8	16	4	0	0	129
NE	0	0	3	3	6	12	29	29	16	7	2	0	0	108
ENE	0	0	4	3	3	13	25	17	7	3	1	0	0	77
E	0	0	3	4	1	9	23	18	6	2	0	0	0	67
ESE	0	1	3	3	0	9	22	9	2	0	0	0	0	49
SE	0	0	2	3	5	11	30	18	5	1	0	0	0	76
SSE	0	2	4	2	6	13	27	21	19	6	2	1	0	104
S	0	0	1	1	8	18	36	29	41	28	10	0	0	173
SSW	0	0	6	4	6	12	26	31	26	24	30	0	0	166
SW	0	1	1	2	8	9	17	18	34	30	46	9	0	176
WSW	0	2	3	6	1	13	22	18	20	26	26	1	0	139
W	0	0	4	3	2	8	13	16	8	8	7	0	0	70
WNW	0	0	2	3	6	4	8	15	26	18	9	2	0	94
NW	0	1	5	5	6	5	24	19	25	20	15	1	0	127
NNW	1	0	2	7	5	10	29	25	20	23	4	0	1	128
Calm	1													1
Total	2	8	45	53	74	170	414	344	280	219	162	15	2	1789

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class F HRS

Dir	Wind Speed (m/sec)												U>10	Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10		
N	0	1	2	2	4	4	23	19	6	3	1	0	0	66
NNE	1	0	3	3	8	11	31	22	12	1	0	1	0	94
NE	0	0	3	5	2	9	20	19	8	0	0	0	0	67
ENE	0	2	0	1	2	3	11	4	5	0	0	0	0	28
E	0	2	1	5	2	3	7	7	5	1	0	0	0	33
ESE	0	1	3	2	2	6	13	3	0	0	0	0	0	30
SE	0	0	1	0	2	9	10	4	2	0	0	0	0	28
SSE	0	1	2	2	5	8	24	12	9	4	0	0	0	68
S	1	2	1	0	3	12	34	28	25	5	7	0	0	119
SSW	0	0	0	5	7	8	29	23	9	10	6	0	1	99
SW	0	1	3	3	6	9	24	16	8	6	3	0	0	80
WSW	0	1	1	2	1	5	19	11	7	3	0	0	0	50
W	0	0	0	3	2	7	11	13	4	0	1	0	0	41
WNW	0	1	2	5	3	6	12	8	10	3	2	0	0	52
NW	0	1	2	0	4	4	21	14	25	8	1	0	0	81
NNW	0	0	3	1	2	6	20	15	7	6	1	0	0	61
Calm	4													4
Total	6	13	27	39	55	111	311	220	143	50	22	1	1	1001

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-207
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class G HRS

Dir	Wind Speed (m/sec)												U>10	Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10		
N	1	1	6	8	9	20	51	25	8	0	0	0	0	130
NNE	0	2	6	5	15	25	67	47	4	1	0	0	0	172
NE	1	1	4	12	11	33	53	28	11	0	0	0	0	155
ENE	2	1	5	6	10	13	36	14	2	0	1	0	0	91
E	0	1	5	8	3	10	10	8	0	0	0	0	0	45
ESE	0	0	3	2	10	5	15	4	1	0	0	0	0	40
SE	0	2	6	4	10	15	19	10	4	0	0	0	0	71
SSE	0	5	1	4	7	17	44	26	11	4	0	0	0	120
S	0	1	3	7	13	23	68	72	27	3	1	0	0	218
SSW	1	1	3	6	6	19	47	57	17	13	1	0	0	172
SW	1	1	2	2	13	12	40	17	14	3	0	0	0	106
WSW	0	0	0	4	4	10	21	11	3	2	0	0	0	55
W	0	0	5	5	7	13	16	11	6	0	0	0	0	64
WNW	1	0	4	2	9	4	14	11	7	0	1	0	0	53
NW	0	1	3	4	4	14	29	17	8	4	0	0	0	85
NNW	0	1	4	5	16	19	41	24	11	0	0	0	0	122
Calm	7													7
Total	14	18	60	85	148	254	574	384	135	30	4	0	0	1707

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-208
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
FIRST YEAR OF LEE NUCLEAR STATION DATA
(ALL STABILITY CLASSES COMBINED)
60-M MEASUREMENT LEVEL

Dir	Wind Speed (m/sec)													Total	Ave Speed
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10		
N	1	3	14	15	27	67	164	132	68	43	31	8	1	575	3.3
NNE	1	3	10	16	35	74	195	180	102	62	45	10	0	734	3.4
NE	1	1	10	23	31	98	186	187	104	35	24	3	1	706	3.1
ENE	2	4	11	18	20	49	144	90	54	16	9	0	0	418	2.9
E	0	3	9	28	16	45	94	53	23	5	1	0	0	278	2.5
ESE	0	3	11	13	19	44	95	33	6	2	0	0	0	227	2.3
SE	0	2	13	14	28	79	126	53	14	3	4	0	0	337	2.4
SSE	0	8	13	15	38	82	175	114	78	28	14	4	6	576	3.0
S	1	3	14	14	38	88	251	193	129	53	36	5	2	828	3.3
SSW	1	2	10	20	23	67	189	215	141	122	97	12	4	902	3.9
SW	1	3	9	11	38	46	153	131	135	106	156	45	13	849	4.5
WSW	0	3	6	13	10	38	99	102	83	80	64	26	6	529	4.2
W	0	0	11	16	19	42	74	65	38	25	23	4	0	318	3.3
WNW	1	2	9	17	27	32	66	64	71	48	45	22	9	413	4.1
NW	0	3	15	14	25	42	143	87	80	53	61	21	8	553	3.9
NNW	1	1	13	15	31	55	137	95	60	48	36	6	5	505	3.4
Calm	13													13	
Total	10	44	179	264	428	949	2290	1793	1185	732	648	167	55	8760	3.5

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2006.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
Page 1 of 7

Stability Class A HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	0	0	1	1	4	5	3	4	3	4	1	0	23
NNE	0	0	0	0	0	2	6	8	5	2	3	1	0	24
NE	0	0	0	0	1	3	9	16	12	1	2	1	0	43
ENE	0	0	0	1	1	3	11	14	11	3	1	0	0	43
E	0	0	0	2	1	4	9	4	1	0	0	0	0	20
ESE	0	0	0	1	1	4	8	3	1	0	0	0	0	17
SE	0	0	0	1	1	7	14	6	4	1	0	0	0	32
SSE	0	0	0	1	3	7	14	13	7	1	0	1	1	45
S	0	0	1	1	1	2	14	14	10	1	2	1	1	45
SSW	0	0	0	0	1	2	13	20	23	20	11	4	1	93
SW	0	0	0	0	2	1	6	16	21	16	25	8	2	95
WSW	0	0	0	0	0	1	4	8	11	13	7	9	2	52
W	0	0	1	0	1	2	3	4	6	8	2	1	0	26
WNW	0	0	1	1	1	1	5	8	7	7	12	5	3	46
NW	0	0	1	1	0	1	6	6	5	4	9	7	3	40
NNW	0	0	0	0	1	2	4	2	4	3	6	0	0	19
Calm	0													0
Total	0	0	2	6	12	41	127	142	127	79	81	36	11	665

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
Page 2 of 7

Stability Class B HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	1	0	0	0	4	5	5	10	5	5	0	0	32
NNE	0	0	0	0	1	2	5	10	5	5	6	1	0	34
NE	0	0	0	1	3	6	7	14	9	3	4	0	0	44
ENE	0	0	0	1	1	1	9	9	12	1	1	1	0	34
E	0	0	0	0	1	1	9	5	2	1	0	0	0	18
ESE	0	0	0	1	1	2	10	3	1	0	0	0	0	17
SE	0	0	0	0	1	3	12	5	0	0	0	0	0	20
SSE	0	0	0	2	2	4	18	6	1	1	0	0	0	32
S	0	0	1	0	2	1	15	11	4	2	0	0	0	34
SSW	0	0	0	1	0	3	14	18	18	9	6	2	1	70
SW	0	0	0	0	0	2	10	16	16	13	19	6	3	84
WSW	0	0	0	0	0	1	7	13	11	9	8	4	1	52
W	0	0	0	0	0	2	6	7	5	5	5	1	0	29
WNW	0	0	0	0	1	2	10	7	3	3	6	4	4	37
NW	0	0	0	0	0	2	12	15	5	4	6	3	3	48
NNW	0	0	0	0	0	1	2	5	3	2	1	0	0	14
Calm	0													0
Total	0	1	1	4	10	35	147	147	102	60	64	19	11	600

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class C HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	0	1	1	1	4	5	9	2	4	1	1	0	27
NNE	0	0	0	1	1	2	7	8	7	8	4	1	0	36
NE	0	0	0	1	1	8	17	16	10	3	6	1	0	62
ENE	0	0	0	1	0	4	15	11	8	3	1	1	0	41
E	0	0	0	1	0	6	9	4	2	1	0	0	0	21
ESE	0	0	0	0	2	5	6	1	0	1	0	0	0	13
SE	0	0	1	2	2	11	17	3	0	0	0	0	0	34
SSE	0	0	0	1	2	12	25	7	3	1	1	0	1	51
S	0	0	1	1	1	4	23	10	4	1	2	0	0	45
SSW	0	0	0	0	1	2	18	17	10	11	9	2	1	70
SW	0	0	1	0	0	4	19	17	8	8	12	11	5	84
WSW	0	0	0	0	2	3	19	12	8	5	6	4	3	60
W	0	0	0	1	2	2	10	6	4	1	2	1	0	27
WNW	0	0	0	1	0	3	9	4	5	2	3	2	1	28
NW	0	0	0	0	1	5	12	8	3	3	6	5	3	44
NNW	0	0	1	0	1	4	8	3	3	1	5	1	2	27
Calm	0													0
Total	0	0	3	7	15	75	219	132	74	51	55	27	14	670

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class D HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	1	4	5	6	14	38	33	15	16	15	5	0	151
NNE	0	0	1	4	5	19	47	62	50	26	22	3	0	238
NE	0	0	2	4	7	16	51	66	47	20	15	2	1	230
ENE	0	1	2	6	5	12	33	40	26	10	5	1	0	139
E	0	0	0	7	10	15	29	16	6	3	1	0	0	87
ESE	0	1	2	5	5	15	20	14	3	2	0	0	0	65
SE	0	0	4	4	10	19	36	16	8	3	4	1	0	103
SSE	0	1	6	5	16	26	33	31	15	8	6	3	2	150
S	0	0	5	6	13	20	50	29	21	11	11	4	1	170
SSW	0	1	4	3	5	17	42	47	34	33	23	2	2	211
SW	0	0	1	3	7	9	35	28	30	34	46	15	1	209
WSW	0	0	2	1	6	8	21	27	16	17	17	7	4	123
W	0	1	1	5	6	10	18	12	9	5	7	0	0	72
WNW	0	2	1	6	9	13	16	9	6	10	13	6	4	92
NW	1	1	4	5	9	16	27	13	12	15	25	16	8	150
NNW	0	0	4	7	6	12	21	16	12	18	17	6	2	119
Calm	1													1
Total	1	5	38	73	122	240	517	459	309	228	225	68	23	2309

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class E HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	1	2	2	6	13	30	19	13	7	5	1	1	99
NNE	0	1	2	3	8	11	42	29	18	24	7	0	0	143
NE	0	0	2	3	5	14	33	34	21	12	5	0	0	128
ENE	0	0	4	2	2	11	25	26	15	6	2	0	0	91
E	0	0	2	6	4	9	19	17	9	2	0	0	0	66
ESE	0	1	2	2	2	9	23	10	6	0	0	0	0	52
SE	0	2	3	4	3	11	27	19	7	2	1	0	0	77
SSE	1	1	3	3	6	12	24	22	20	8	3	1	0	102
S	0	0	1	2	7	13	40	38	34	26	8	2	0	171
SSW	0	0	5	3	5	12	27	31	38	34	25	0	0	179
SW	0	1	3	2	7	9	19	19	31	33	38	6	0	166
WSW	0	1	2	4	2	10	17	15	15	19	18	1	0	103
W	0	1	3	2	4	7	14	16	8	8	4	0	0	65
WNW	0	1	3	2	4	3	8	11	20	16	9	2	0	78
NW	0	1	4	5	6	10	20	15	23	19	13	1	0	116
NNW	1	0	2	5	6	11	26	21	18	18	6	0	1	113
Calm	1													1
Total	2	8	38	47	75	162	393	341	294	232	143	13	1	1749

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class F HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	0	1	2	2	3	8	21	15	6	4	2	0	0	61
NNE	1	0	3	3	6	8	31	24	13	4	1	1	0	94
NE	0	0	2	4	3	9	16	22	16	3	0	0	0	74
ENE	1	1	0	1	2	3	9	8	10	2	0	0	0	37
E	0	2	2	3	1	3	8	9	4	1	0	0	0	31
ESE	0	1	2	2	2	7	14	3	1	0	0	0	0	28
SE	0	0	2	1	3	6	15	8	3	1	1	0	0	38
SSE	0	2	2	3	3	6	19	17	6	4	1	0	0	61
S	1	1	1	1	4	11	33	25	18	5	6	0	0	104
SSW	0	0	1	4	6	9	30	24	17	11	9	0	1	110
SW	0	1	2	2	3	10	20	16	12	6	2	0	0	74
WSW	0	1	1	2	1	3	15	8	5	2	1	0	0	38
W	0	1	2	3	4	6	10	10	4	2	3	0	0	43
WNW	0	1	2	4	4	5	10	6	9	3	1	0	0	43
NW	0	1	2	1	4	4	17	15	18	6	1	1	0	67
NNW	0	1	2	1	4	7	20	15	8	10	1	0	0	68
Calm	3													3
Total	5	9	26	34	50	104	286	223	148	61	26	1	1	973

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-209
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
60-M MEASUREMENT LEVEL
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Stability Class G HRS

Dir	Wind Speed (m/sec)													Total
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10	
N	1	2	7	6	7	21	54	35	12	1	0	0	0	144
NNE	0	3	6	8	10	23	67	48	16	2	0	0	0	182
NE	1	1	5	9	9	29	55	40	16	0	0	0	0	164
ENE	2	1	4	7	8	10	34	13	4	2	1	0	0	84
E	0	1	4	7	5	11	11	8	0	0	0	0	0	45
ESE	0	0	2	2	8	8	24	6	1	0	0	0	0	48
SE	0	1	5	3	9	17	29	12	4	1	0	0	0	80
SSE	0	3	1	4	7	15	44	27	8	2	0	0	0	110
S	0	2	3	8	9	21	63	55	20	3	1	0	0	182
SSW	1	1	5	8	9	19	47	49	18	12	2	0	0	168
SW	1	2	4	5	10	17	51	27	17	5	0	0	0	137
WSW	0	0	1	4	8	9	32	17	6	1	0	0	0	78
W	0	0	6	8	6	12	19	11	6	0	0	0	0	67
WNW	1	0	5	4	7	9	15	13	8	1	1	0	0	61
NW	0	1	2	5	3	14	33	19	11	5	1	0	0	91
NNW	0	2	5	6	15	20	47	35	14	1	1	0	0	146
Calm	5													5
Total	10	16	61	91	126	255	625	414	157	34	5	0	0	1793

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-210
LEE NUCLEAR STATION JOINT FREQUENCY DISTRIBUTION
TWO YEARS OF LEE NUCLEAR STATION DATA
(ALL STABILITY CLASSES COMBINED)
60-M MEASUREMENT LEVEL

Dir	Wind Speed (m/sec)													Total	Ave Speed
	0.45<U ≤0.6	0.6<U ≤0.75	0.75<U ≤1.0	1.0<U ≤1.25	1.25<U ≤1.5	1.5<U ≤2.0	2.0<U ≤3.0	3.0<U ≤4.0	4.0<U ≤5.0	5.0<U ≤6.0	6.0<U ≤8.0	8<U ≤10	U>10		
N	1	4	14	15	23	67	158	119	61	38	31	8	1	538	3.3
NNE	1	3	12	17	30	66	204	188	113	71	42	5	0	751	3.4
NE	1	1	10	20	28	85	187	208	130	40	31	3	1	745	3.3
ENE	3	2	9	17	19	42	136	121	84	25	10	2	0	470	3.1
E	0	2	8	25	21	48	93	62	23	6	1	0	0	287	2.5
ESE	0	2	7	10	19	49	104	38	11	2	0	0	0	241	2.4
SE	0	3	13	14	27	73	150	68	24	6	5	1	0	383	2.5
SSE	1	6	11	18	36	82	177	123	59	24	10	4	3	552	2.9
S	1	3	11	18	36	73	236	182	111	47	29	6	2	751	3.2
SSW	1	1	13	18	25	62	190	205	157	130	85	10	4	901	3.9
SW	1	3	10	11	28	51	161	138	135	116	141	45	10	849	4.4
WSW	0	2	5	11	18	33	114	100	72	65	56	25	9	507	4.1
W	0	2	11	18	23	39	79	65	40	28	20	3	0	328	3.2
WNW	1	3	10	16	24	34	72	56	57	41	44	17	12	386	4.0
NW	1	3	12	15	22	50	126	89	75	55	60	32	17	557	4.1
NNW	1	3	13	19	31	57	127	97	61	51	35	6	4	504	3.4
Calm	9													9	
Total	8	38	169	262	410	912	2314	1858	1211	745	599	165	61	8760	3.5

NOTES:

1. Data from Lee Nuclear Station Site Meteorological Tower, 12/1/2005 – 11/30/2007.
2. Calms are wind speeds less than or equal to 0.45 m/sec.
3. Differences in the totals reported are associated with rounding. Joint frequency distribution values are rounded to integers for PAVAN input; however, the totals are based on values with greater precision.
4. The joint frequency distribution based on the two-year data set is annualized to total 8760 hrs.

TABLE 2CC-211
ACCIDENT X/Q VALUE COMPARISON

	DCD Rev. 17 Value	One-Year Value	Two-Year Value	Ratio of One-Year Value to DCD Value	Ratio of Two-Year Value to DCD Value	Change in Ratio to DCD Value
EAB (1339 m, SE)						
0-2 hours	5.1E-04	3.52E-04	3.46E-04	69.0%	67.8%	-1.2%
LPZ (SE)						
0-8 hours	2.2E-04	7.16E-05	8.01E-05	32.5%	36.4%	3.9%
8-24 hours	1.6E-04	4.92E-05	5.49E-05	30.8%	34.3%	3.6%
24-96 hours	1.0E-04	2.18E-05	2.42E-05	21.8%	24.2%	2.4%
96-720 hours	8.0E-05	6.80E-06	7.46E-06	8.5%	9.3%	0.8%

TABLE 2CC-212
CONTROL ROOM X/Q VALUE COMPARISON
Page 1 of 6

CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Plant Vent	Plant Vent	Plant Vent	Plant Vent	Plant Vent	Plant Vent
0-2 hours	3.0E-03	2.0E-03	2.0E-03	66.7%	66.7%	0.0%
2-8 hours	2.5E-03	1.5E-03	1.5E-03	60.0%	60.0%	0.0%
8-24 hours	1.0E-03	5.9E-04	5.8E-04	59.0%	58.0%	1.0%
1-4 days	8.0E-04	4.5E-04	4.8E-04	56.3%	60.0%	-3.8%
4-30 days	6.0E-04	3.2E-04	3.6E-04	53.3%	60.0%	-6.7%
CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser
0-2 hours	3.0E-03	1.7E-03	1.8E-03	56.7%	60.0%	-3.3%
2-8 hours	2.5E-03	1.4E-03	1.5E-03	56.0%	60.0%	-4.0%
8-24 hours	1.0E-03	5.9E-04	6.4E-04	59.0%	64.0%	-5.0%
1-4 days	8.0E-04	4.5E-04	5.3E-04	56.3%	66.3%	-10.0%
4-30 days	6.0E-04	2.8E-04	3.4E-04	46.7%	56.7%	-10.0%
CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Steam Line Break	Steam Line Break	Steam Line Break	Steam Line Break	Steam Line Break	Steam Line Break
0-2 hours	2.4E-02	1.2E-02	1.3E-02	50.0%	54.2%	-4.2%
2-8 hours	2.0E-02	6.5E-03	7.2E-03	32.5%	36.0%	-3.5%
8-24 hours	7.5E-03	2.9E-03	3.0E-03	38.7%	40.0%	-1.3%
1-4 days	5.5E-03	2.1E-03	2.4E-03	38.2%	43.6%	-5.5%
4-30 days	5.0E-03	1.5E-03	1.8E-03	30.0%	36.0%	-6.0%

TABLE 2CC-212
CONTROL ROOM X/Q VALUE COMPARISON
Page 2 of 6

CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	CAR Stack	CAR Stack	CAR Stack	CAR Stack	CAR Stack	CAR Stack
0-2 hours	6.0E-03	1.6E-03	1.6E-03	26.7%	26.7%	0.0%
2-8 hours	4.0E-03	1.3E-03	1.3E-03	32.5%	32.5%	0.0%
8-24 hours	2.0E-03	5.3E-04	5.1E-04	26.5%	25.5%	1.0%
1-4 days	1.5E-03	3.9E-04	3.9E-04	26.0%	26.0%	0.0%
4-30 days	1.0E-03	3.0E-04	2.8E-04	30.0%	28.0%	2.0%
CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Containment Shell	Containment Shell	Containment Shell	Containment Shell	Containment Shell	Containment Shell
0-2 hours	6.0E-03	2.7E-03	2.7E-03	45.0%	45.0%	0.0%
2-8 hours	3.6E-03	1.8E-03	1.8E-03	50.0%	50.0%	0.0%
8-24 hours	1.4E-03	7.0E-04	7.4E-04	50.0%	52.9%	-2.9%
1-4 days	1.8E-03	6.2E-04	6.9E-04	34.4%	38.3%	-3.9%
4-30 days	1.5E-03	4.3E-04	4.8E-04	28.7%	32.0%	-3.3%
CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve
0-2 hours	2.0E-02	1.1E-02	1.1E-02	55.0%	55.0%	0.0%
2-8 hours	1.8E-02	5.3E-03	5.6E-03	29.4%	31.1%	-1.7%
8-24 hours	7.0E-03	2.3E-03	2.3E-03	32.9%	32.9%	0.0%
1-4 days	5.0E-03	1.7E-03	1.9E-03	34.0%	38.0%	-4.0%
4-30 days	4.5E-03	1.3E-03	1.5E-03	28.9%	33.3%	-4.4%

TABLE 2CC-212
CONTROL ROOM X/Q VALUE COMPARISON
Page 3 of 6

CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Fuel Handling Area	FB Blowout Panel	FB Blowout Panel	FB Blowout Panel	FB Blowout Panel	FB Blowout Panel
0-2 hours	6.0E-03	1.6E-03	1.6E-03	26.7%	26.7%	0.0%
2-8 hours	4.0E-03	1.2E-03	1.2E-03	30.0%	30.0%	0.0%
8-24 hours	2.0E-03	4.2E-04	4.3E-04	21.0%	21.5%	-0.5%
1-4 days	1.5E-03	4.1E-04	4.1E-04	27.3%	27.3%	0.0%
4-30 days	1.0E-03	3.1E-04	3.7E-04	31.0%	37.0%	-6.0%
CR HVAC Intake	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Fuel Handling Area	RWB TSA Door	RWB TSA Door	RWB TSA Door	RWB TSA Door	RWB TSA Door
0-2 hours	6.0E-03	1.2E-03	1.2E-03	20.0%	20.0%	0.0%
2-8 hours	4.0E-03	9.0E-04	9.0E-04	22.5%	22.5%	0.0%
8-24 hours	2.0E-03	3.5E-04	3.3E-04	17.5%	16.5%	1.0%
1-4 days	1.5E-03	3.0E-04	2.9E-04	20.0%	19.3%	0.7%
4-30 days	1.0E-03	2.3E-04	2.6E-04	23.0%	26.0%	-3.0%

TABLE 2CC-212
CONTROL ROOM X/Q VALUE COMPARISON
Page 4 of 6

Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Plant Vent	Plant Vent	Plant Vent	Plant Vent	Plant Vent	Plant Vent
0-2 hours	1.0E-03	4.3E-04	4.4E-04	43.0%	44.0%	-1.0%
2-8 hours	7.5E-04	3.4E-04	3.5E-04	45.3%	46.7%	-1.3%
8-24 hours	3.5E-04	1.4E-04	1.4E-04	40.0%	40.0%	0.0%
1-4 days	2.8E-04	1.1E-04	1.1E-04	39.3%	39.3%	0.0%
4-30 days	2.5E-04	7.3E-05	8.2E-05	29.2%	32.8%	-3.6%
Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser	PCS Air Diffuser
0-2 hours	1.0E-03	4.8E-04	4.8E-04	48.0%	48.0%	0.0%
2-8 hours	7.5E-04	3.7E-04	3.7E-04	49.3%	49.3%	0.0%
8-24 hours	3.5E-04	1.6E-04	1.6E-04	45.7%	45.7%	0.0%
1-4 days	2.8E-04	1.2E-04	1.3E-04	42.9%	46.4%	-3.6%
4-30 days	2.5E-04	7.8E-05	9.1E-05	31.2%	36.4%	-5.2%
Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Steam Line Break	Steam Line Break	Steam Line Break	Steam Line Break	Steam Line Break	Steam Line Break
0-2 hours	4.0E-03	8.4E-04	8.5E-04	21.0%	21.3%	-0.3%
2-8 hours	3.2E-03	6.0E-04	6.4E-04	18.8%	20.0%	-1.3%
8-24 hours	1.2E-03	2.8E-04	2.8E-04	23.3%	23.3%	0.0%
1-4 days	1.0E-03	1.9E-04	1.9E-04	19.0%	19.0%	0.0%
4-30 days	8.0E-04	1.1E-04	1.4E-04	13.8%	17.5%	-3.8%

TABLE 2CC-212
CONTROL ROOM X/Q VALUE COMPARISON
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Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	CAR Stack	CAR Stack	CAR Stack	CAR Stack	CAR Stack	CAR Stack
0-2 hours	2.0E-02	3.3E-03	3.4E-03	16.5%	17.0%	-0.5%
2-8 hours	1.8E-02	2.7E-03	2.9E-03	15.0%	16.1%	-1.1%
8-24 hours	7.0E-03	1.0E-03	1.3E-03	14.3%	18.6%	-4.3%
1-4 days	5.0E-03	8.0E-04	9.2E-04	16.0%	18.4%	-2.4%
4-30 days	4.5E-03	4.5E-04	6.4E-04	10.0%	14.2%	-4.2%
Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Containment Shell	Containment Shell	Containment Shell	Containment Shell	Containment Shell	Containment Shell
0-2 hours	1.0E-03	4.9E-04	5.0E-04	49.0%	50.0%	-1.0%
2-8 hours	7.5E-04	3.9E-04	4.0E-04	52.0%	53.3%	-1.3%
8-24 hours	3.5E-04	1.6E-04	1.6E-04	45.7%	45.7%	0.0%
1-4 days	2.8E-04	1.2E-04	1.4E-04	42.9%	50.0%	-7.1%
4-30 days	2.5E-04	8.5E-05	9.8E-05	34.0%	39.2%	-5.2%
Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve	PORV/Safety Valve
0-2 hours	4.0E-03	8.6E-04	8.7E-04	21.5%	21.8%	-0.3%
2-8 hours	3.2E-03	6.3E-04	6.8E-04	19.7%	21.3%	-1.6%
8-24 hours	1.2E-03	2.9E-04	3.0E-04	24.2%	25.0%	-0.8%
1-4 days	1.0E-03	1.9E-04	2.1E-04	19.0%	21.0%	-2.0%
4-30 days	8.0E-04	1.1E-04	1.5E-04	13.8%	18.8%	-5.0%

TABLE 2CC-212
CONTROL ROOM X/Q VALUE COMPARISON
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Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Fuel Handling Area	FB Blowout Panel	FB Blowout Panel	FB Blowout Panel	FB Blowout Panel	FB Blowout Panel
0-2 hours	6.0E-03	3.6E-04	3.6E-04	6.0%	6.0%	0.0%
2-8 hours	4.0E-03	2.5E-04	2.7E-04	6.3%	6.8%	-0.5%
8-24 hours	2.0E-03	1.1E-04	1.0E-04	5.5%	5.0%	0.5%
1-4 days	1.5E-03	8.6E-05	8.9E-05	5.7%	5.9%	-0.2%
4-30 days	1.0E-03	6.6E-05	7.4E-05	6.6%	7.4%	-0.8%
Annex Bldg Entrance	AP1000 DCD (sec/m ³)	One-Year Value (sec/m ³)	Two-Year Value (sec/m ³)	Ratio of One-Year Value to DCD	Ratio of Two-Year Value to DCD	Change in Margin
	Fuel Handling Area	RWB TSA Door	RWB TSA Door	RWB TSA Door	RWB TSA Door	RWB TSA Door
0-2 hours	6.0E-03	3.4E-04	3.5E-04	5.7%	5.8%	-0.2%
2-8 hours	4.0E-03	2.4E-04	2.5E-04	6.0%	6.3%	-0.3%
8-24 hours	2.0E-03	1.0E-04	9.8E-05	5.0%	4.9%	0.1%
1-4 days	1.5E-03	8.5E-05	8.7E-05	5.7%	5.8%	-0.1%
4-30 days	1.0E-03	6.6E-05	7.6E-05	6.6%	7.6%	-1.0%

Notes:

CAR is the Condenser Air Removal release point.

RWB TSA is the Radwaste Building Truck Staging Area release point.

FB Blowout Panel is the Fuel Building Blowout Panel release point.

PCS Air Diffuser is the Passive Containment Cooling System (PCS) release point.

Values provided in the AP1000 DCD column are from Revision 17 of the AP1000 DCD.

TABLE 2CC-213
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for no decay, undepleted, for each 22.5° sector at the distances (miles) shown at the top
 Page 1 of 3

Sector	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	4.5
S	1.941E-05	5.731E-06	2.859E-06	1.809E-06	9.998E-07	6.649E-07	4.869E-07	3.868E-07	3.190E-07	2.700E-07	2.331E-07
SSW	1.793E-05	5.323E-06	2.674E-06	1.697E-06	9.366E-07	6.216E-07	4.543E-07	3.599E-07	2.961E-07	2.502E-07	2.156E-07
SW	1.497E-05	4.451E-06	2.247E-06	1.429E-06	7.919E-07	5.264E-07	3.849E-07	3.039E-07	2.494E-07	2.101E-07	1.807E-07
WSW	1.705E-05	5.035E-06	2.512E-06	1.590E-06	8.761E-07	5.815E-07	4.252E-07	3.373E-07	2.779E-07	2.350E-07	2.027E-07
W	1.775E-05	5.217E-06	2.592E-06	1.639E-06	9.050E-07	6.020E-07	4.410E-07	3.509E-07	2.898E-07	2.455E-07	2.122E-07
WNW	1.823E-05	5.344E-06	2.645E-06	1.668E-06	9.234E-07	6.155E-07	4.516E-07	3.599E-07	2.976E-07	2.524E-07	2.183E-07
NW	1.600E-05	4.731E-06	2.370E-06	1.503E-06	8.302E-07	5.516E-07	4.034E-07	3.197E-07	2.631E-07	2.223E-07	1.916E-07
NNW	1.163E-05	3.485E-06	1.787E-06	1.144E-06	6.369E-07	4.234E-07	3.093E-07	2.429E-07	1.982E-07	1.663E-07	1.425E-07
N	8.995E-06	2.736E-06	1.441E-06	9.336E-07	5.249E-07	3.497E-07	2.554E-07	1.988E-07	1.609E-07	1.340E-07	1.141E-07
NNE	7.088E-06	2.155E-06	1.132E-06	7.325E-07	4.065E-07	2.685E-07	1.949E-07	1.513E-07	1.223E-07	1.018E-07	8.660E-08
NE	5.185E-06	1.589E-06	8.401E-07	5.436E-07	3.005E-07	1.977E-07	1.430E-07	1.104E-07	8.876E-08	7.353E-08	6.231E-08
ENE	4.547E-06	1.380E-06	7.165E-07	4.593E-07	2.541E-07	1.677E-07	1.217E-07	9.446E-08	7.635E-08	6.353E-08	5.404E-08
E	6.328E-06	1.881E-06	9.479E-07	6.018E-07	3.322E-07	2.202E-07	1.608E-07	1.269E-07	1.041E-07	8.770E-08	7.542E-08
ESE	1.927E-05	5.629E-06	2.767E-06	1.740E-06	9.573E-07	6.365E-07	4.664E-07	3.724E-07	3.085E-07	2.621E-07	2.270E-07
SE	5.046E-05	1.468E-05	7.164E-06	4.492E-06	2.461E-06	1.634E-06	1.197E-06	9.594E-07	7.973E-07	6.793E-07	5.897E-07
SSE	2.581E-05	7.563E-06	3.738E-06	2.359E-06	1.298E-06	8.622E-07	6.314E-07	5.039E-07	4.172E-07	3.542E-07	3.067E-07

TABLE 2CC-213
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for no decay, undepleted, for each 22.5° sector at the distances (miles) shown at the top
 Page 2 of 3

Sector	5	7.5	10	15	20	25	30	35	40	45	50
S	2.044E-07	1.236E-07	8.661E-08	5.264E-08	3.707E-08	2.827E-08	2.267E-08	1.882E-08	1.603E-08	1.391E-08	1.226E-08
SSW	1.888E-07	1.136E-07	7.935E-08	4.803E-08	3.373E-08	2.568E-08	2.056E-08	1.705E-08	1.451E-08	1.258E-08	1.108E-08
SW	1.580E-07	9.445E-08	6.570E-08	3.955E-08	2.768E-08	2.102E-08	1.680E-08	1.391E-08	1.182E-08	1.024E-08	9.006E-09
WSW	1.777E-07	1.073E-07	7.513E-08	4.562E-08	3.211E-08	2.449E-08	1.964E-08	1.630E-08	1.388E-08	1.213E-08	1.062E-08
W	1.862E-07	1.129E-07	7.932E-08	4.834E-08	3.410E-08	2.604E-08	2.091E-08	1.737E-08	1.480E-08	1.286E-08	1.134E-08
WNW	1.917E-07	1.165E-07	8.197E-08	5.004E-08	3.533E-08	2.699E-08	2.168E-08	1.802E-08	1.536E-08	1.335E-08	1.177E-08
NW	1.678E-07	1.010E-07	7.061E-08	4.277E-08	3.006E-08	2.289E-08	1.834E-08	1.522E-08	1.295E-08	1.123E-08	9.895E-09
NNW	1.242E-07	7.331E-08	5.057E-08	3.010E-08	2.092E-08	1.580E-08	1.257E-08	1.037E-08	8.786E-09	7.591E-09	6.663E-09
N	9.888E-08	5.713E-08	3.881E-08	2.262E-08	1.548E-08	1.156E-08	9.115E-09	7.461E-09	6.276E-09	5.391E-09	4.707E-09
NNE	7.499E-08	4.329E-08	2.941E-08	1.716E-08	1.177E-08	8.802E-09	6.951E-09	5.698E-09	4.799E-09	4.127E-09	3.608E-09
NE	5.379E-08	3.070E-08	2.069E-08	1.195E-08	8.151E-09	6.069E-09	4.776E-09	3.903E-09	3.280E-09	2.814E-09	2.455E-09
ENE	4.681E-08	2.708E-08	1.842E-08	1.078E-08	7.423E-09	5.567E-09	4.406E-09	3.619E-09	3.053E-09	2.629E-09	2.301E-09
E	6.593E-08	3.943E-08	2.744E-08	1.654E-08	1.159E-08	8.806E-09	7.044E-09	5.835E-09	4.960E-09	4.299E-09	3.783E-09
ESE	1.996E-07	1.219E-07	8.606E-08	5.278E-08	3.739E-08	2.864E-08	2.305E-08	1.919E-08	1.638E-08	1.425E-08	1.258E-08
SE	5.197E-07	3.198E-07	2.268E-07	1.399E-07	9.947E-08	7.640E-08	6.162E-08	5.139E-08	4.393E-08	3.826E-08	3.382E-08
SSE	2.696E-07	1.645E-07	1.159E-07	7.101E-08	5.024E-08	3.845E-08	3.092E-08	2.573E-08	2.195E-08	1.909E-08	1.685E-08

TABLE 2CC-213
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for no decay, undepleted, for each 22.5° sector for each segment (miles) shown at the top
 Page 3 of 3

Sector	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.031E-06	1.031E-06	4.943E-07	3.197E-07	2.334E-07	1.251E-07	5.327E-08	2.838E-08	1.886E-08	1.393E-08
SSW	2.828E-06	9.656E-07	4.611E-07	2.968E-07	2.159E-07	1.151E-07	4.864E-08	2.578E-08	1.709E-08	1.260E-08
SW	2.373E-06	8.155E-07	3.902E-07	2.500E-07	1.810E-07	9.580E-08	4.009E-08	2.111E-08	1.394E-08	1.025E-08
WSW	2.663E-06	9.037E-07	4.317E-07	2.785E-07	2.030E-07	1.086E-07	4.618E-08	2.458E-08	1.633E-08	1.206E-08
W	2.752E-06	9.334E-07	4.479E-07	2.904E-07	2.124E-07	1.143E-07	4.890E-08	2.614E-08	1.740E-08	1.287E-08
WNW	2.811E-06	9.521E-07	4.586E-07	2.982E-07	2.186E-07	1.179E-07	5.060E-08	2.709E-08	1.805E-08	1.336E-08
NW	2.509E-06	8.558E-07	4.094E-07	2.637E-07	1.919E-07	1.024E-07	4.331E-08	2.298E-08	1.524E-08	1.125E-08
NNW	1.879E-06	6.548E-07	3.131E-07	1.988E-07	1.428E-07	7.451E-08	3.057E-08	1.588E-08	1.040E-08	7.602E-09
N	1.503E-06	5.379E-07	2.579E-07	1.615E-07	1.144E-07	5.827E-08	2.305E-08	1.163E-08	7.482E-09	5.400E-09
NNE	1.182E-06	4.176E-07	1.971E-07	1.228E-07	8.680E-08	4.417E-08	1.749E-08	8.853E-09	5.713E-09	4.134E-09
NE	8.747E-07	3.088E-07	1.445E-07	8.913E-08	6.248E-08	3.138E-08	1.221E-08	6.107E-09	3.915E-09	2.819E-09
ENE	7.497E-07	2.613E-07	1.231E-07	7.664E-08	5.417E-08	2.762E-08	1.099E-08	5.598E-09	3.628E-09	2.633E-09
E	1.002E-06	3.423E-07	1.631E-07	1.044E-07	7.554E-08	3.999E-08	1.676E-08	8.843E-09	5.847E-09	4.304E-09
ESE	2.946E-06	9.885E-07	4.742E-07	3.091E-07	2.272E-07	1.233E-07	5.334E-08	2.874E-08	1.922E-08	1.426E-08
SE	7.648E-06	2.545E-06	1.218E-06	7.986E-07	5.903E-07	3.229E-07	1.412E-07	7.664E-08	5.147E-08	3.830E-08
SSE	3.975E-06	1.340E-06	6.419E-07	4.180E-07	3.071E-07	1.663E-07	7.176E-08	3.858E-08	2.578E-08	1.911E-08

TABLE 2CC-214
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for a 2.26 day decay, undepleted, for each 22.5° sector at the distances (miles) shown at the top
 Page 1 of 3

Sector	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	4.5
S	1.936E-05	5.700E-06	2.836E-06	1.791E-06	9.846E-07	6.514E-07	4.745E-07	3.750E-07	3.076E-07	2.589E-07	2.223E-07
SSW	1.788E-05	5.294E-06	2.653E-06	1.680E-06	9.225E-07	6.091E-07	4.429E-07	3.490E-07	2.856E-07	2.399E-07	2.057E-07
SW	1.493E-05	4.430E-06	2.232E-06	1.416E-06	7.815E-07	5.171E-07	3.764E-07	2.959E-07	2.416E-07	2.027E-07	1.735E-07
WSW	1.700E-05	5.007E-06	2.492E-06	1.573E-06	8.623E-07	5.693E-07	4.140E-07	3.266E-07	2.676E-07	2.250E-07	1.930E-07
W	1.771E-05	5.193E-06	2.574E-06	1.624E-06	8.929E-07	5.913E-07	4.312E-07	3.415E-07	2.807E-07	2.367E-07	2.036E-07
WNW	1.818E-05	5.318E-06	2.626E-06	1.653E-06	9.104E-07	6.040E-07	4.412E-07	3.498E-07	2.878E-07	2.430E-07	2.091E-07
NW	1.597E-05	4.715E-06	2.358E-06	1.492E-06	8.219E-07	5.442E-07	3.967E-07	3.133E-07	2.569E-07	2.163E-07	1.858E-07
NNW	1.161E-05	3.473E-06	1.777E-06	1.136E-06	6.303E-07	4.175E-07	3.039E-07	2.378E-07	1.934E-07	1.617E-07	1.381E-07
N	8.982E-06	2.728E-06	1.435E-06	9.284E-07	5.213E-07	3.458E-07	2.517E-07	1.953E-07	1.577E-07	1.309E-07	1.111E-07
NNE	7.077E-06	2.148E-06	1.127E-06	7.283E-07	4.030E-07	2.654E-07	1.921E-07	1.487E-07	1.198E-07	9.937E-08	8.425E-08
NE	5.180E-06	1.586E-06	8.378E-07	5.416E-07	2.989E-07	1.962E-07	1.416E-07	1.091E-07	8.759E-08	7.242E-08	6.124E-08
ENE	4.542E-06	1.377E-06	7.142E-07	4.573E-07	2.524E-07	1.662E-07	1.203E-07	9.319E-08	7.514E-08	6.237E-08	5.293E-08
E	6.315E-06	1.874E-06	9.424E-07	5.972E-07	3.284E-07	2.169E-07	1.577E-07	1.240E-07	1.013E-07	8.500E-08	7.280E-08
ESE	1.922E-05	5.604E-06	2.749E-06	1.725E-06	9.451E-07	6.258E-07	4.567E-07	3.631E-07	2.994E-07	2.533E-07	2.184E-07
SE	5.038E-05	1.464E-05	7.130E-06	4.464E-06	2.437E-06	1.613E-06	1.178E-06	9.413E-07	7.798E-07	6.623E-07	5.731E-07
SSE	2.576E-05	7.532E-06	3.715E-06	2.340E-06	1.282E-06	8.487E-07	6.191E-07	4.921E-07	4.057E-07	3.432E-07	2.959E-07

TABLE 2CC-214
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for a 2.26 day decay, undepleted, for each 22.5° sector at the distances (miles) shown at the top
 Page 2 of 3

Sector	5	7.5	10	15	20	25	30	35	40	45	50
S	1.939E-07	1.141E-07	7.785E-08	4.486E-08	2.998E-08	2.172E-08	1.658E-08	1.311E-08	1.064E-08	8.817E-09	7.424E-09
SSW	1.791E-07	1.048E-07	7.126E-08	4.085E-08	2.720E-08	1.965E-08	1.495E-08	1.179E-08	9.553E-09	7.898E-09	6.637E-09
SW	1.509E-07	8.810E-08	5.984E-08	3.437E-08	2.297E-08	1.666E-08	1.274E-08	1.009E-08	8.212E-09	6.820E-09	5.757E-09
WSW	1.682E-07	9.871E-08	6.720E-08	3.859E-08	2.572E-08	1.859E-08	1.414E-08	1.116E-08	9.034E-09	7.467E-09	6.273E-09
W	1.779E-07	1.054E-07	7.230E-08	4.206E-08	2.834E-08	2.069E-08	1.590E-08	1.265E-08	1.033E-08	8.604E-09	7.282E-09
WNW	1.828E-07	1.084E-07	7.444E-08	4.332E-08	2.918E-08	2.130E-08	1.635E-08	1.300E-08	1.061E-08	8.838E-09	7.476E-09
NW	1.622E-07	9.591E-08	6.585E-08	3.850E-08	2.613E-08	1.922E-08	1.488E-08	1.193E-08	9.812E-09	8.232E-09	7.015E-09
NNW	1.199E-07	6.948E-08	4.706E-08	2.702E-08	1.812E-08	1.322E-08	1.017E-08	8.108E-09	6.643E-09	5.556E-09	4.723E-09
N	9.601E-08	5.465E-08	3.658E-08	2.069E-08	1.376E-08	9.985E-09	7.654E-09	6.094E-09	4.988E-09	4.171E-09	3.547E-09
NNE	7.271E-08	4.127E-08	2.756E-08	1.554E-08	1.030E-08	7.455E-09	5.701E-09	4.529E-09	3.700E-09	3.089E-09	2.623E-09
NE	5.276E-08	2.982E-08	1.989E-08	1.126E-08	7.521E-09	5.487E-09	4.231E-09	3.388E-09	2.790E-09	2.346E-09	2.006E-09
ENE	4.574E-08	2.614E-08	1.756E-08	1.003E-08	6.735E-09	4.928E-09	3.805E-09	3.048E-09	2.509E-09	2.109E-09	1.801E-09
E	6.338E-08	3.713E-08	2.531E-08	1.464E-08	9.855E-09	7.201E-09	5.542E-09	4.422E-09	3.623E-09	3.029E-09	2.574E-09
ESE	1.912E-07	1.143E-07	7.893E-08	4.639E-08	3.153E-08	2.320E-08	1.795E-08	1.439E-08	1.184E-08	9.935E-09	8.471E-09
SE	5.035E-07	3.050E-07	2.129E-07	1.274E-07	8.792E-08	6.558E-08	5.140E-08	4.169E-08	3.467E-08	2.939E-08	2.530E-08
SSE	2.591E-07	1.549E-07	1.070E-07	6.296E-08	4.282E-08	3.153E-08	2.441E-08	1.957E-08	1.609E-08	1.350E-08	1.149E-08

TABLE 2CC-214
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for a 2.26 day decay, undepleted, for each 22.5° sector for each segment (miles) shown at the top
 Page 3 of 3

Sector	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.008E-06	1.016E-06	4.819E-07	3.083E-07	2.227E-07	1.157E-07	4.558E-08	2.187E-08	1.316E-08	8.842E-09
SSW	2.808E-06	9.515E-07	4.496E-07	2.863E-07	2.060E-07	1.064E-07	4.154E-08	1.978E-08	1.184E-08	7.921E-09
SW	2.358E-06	8.051E-07	3.817E-07	2.423E-07	1.738E-07	8.951E-08	3.496E-08	1.677E-08	1.013E-08	6.839E-09
WSW	2.642E-06	8.899E-07	4.204E-07	2.682E-07	1.933E-07	1.002E-07	3.923E-08	1.871E-08	1.120E-08	7.489E-09
W	2.734E-06	9.213E-07	4.380E-07	2.813E-07	2.039E-07	1.068E-07	4.268E-08	2.082E-08	1.269E-08	8.626E-09
WNW	2.791E-06	9.392E-07	4.481E-07	2.885E-07	2.094E-07	1.098E-07	4.396E-08	2.142E-08	1.305E-08	8.860E-09
NW	2.497E-06	8.475E-07	4.027E-07	2.576E-07	1.861E-07	9.728E-08	3.908E-08	1.932E-08	1.196E-08	8.249E-09
NNW	1.869E-06	6.482E-07	3.078E-07	1.940E-07	1.383E-07	7.071E-08	2.752E-08	1.331E-08	8.138E-09	5.570E-09
N	1.497E-06	5.335E-07	2.543E-07	1.582E-07	1.114E-07	5.581E-08	2.114E-08	1.006E-08	6.118E-09	4.182E-09
NNE	1.177E-06	4.141E-07	1.943E-07	1.203E-07	8.446E-08	4.217E-08	1.588E-08	7.513E-09	4.548E-09	3.097E-09
NE	8.724E-07	3.072E-07	1.432E-07	8.796E-08	6.141E-08	3.050E-08	1.152E-08	5.527E-09	3.401E-09	2.352E-09
ENE	7.473E-07	2.596E-07	1.217E-07	7.543E-08	5.306E-08	2.668E-08	1.024E-08	4.960E-09	3.059E-09	2.113E-09
E	9.960E-07	3.386E-07	1.600E-07	1.016E-07	7.293E-08	3.771E-08	1.488E-08	7.245E-09	4.437E-09	3.036E-09
ESE	2.928E-06	9.764E-07	4.643E-07	3.000E-07	2.187E-07	1.157E-07	4.701E-08	2.332E-08	1.444E-08	9.957E-09
SE	7.613E-06	2.521E-06	1.199E-06	7.812E-07	5.738E-07	3.082E-07	1.289E-07	6.587E-08	4.179E-08	2.944E-08
SSE	3.952E-06	1.325E-06	6.295E-07	4.066E-07	2.963E-07	1.567E-07	6.379E-08	3.169E-08	1.963E-08	1.352E-08

TABLE 2CC-215
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for a 8.00 day decay, depleted, for each 22.5° sector at the distances (miles) shown at the top
 Page 1 of 3

Sector	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	4.5
S	1.805E-05	5.213E-06	2.542E-06	1.579E-06	8.454E-07	5.474E-07	3.915E-07	3.045E-07	2.463E-07	2.048E-07	1.739E-07
SSW	1.668E-05	4.834E-06	2.377E-06	1.481E-06	7.920E-07	5.117E-07	3.653E-07	2.834E-07	2.287E-07	1.898E-07	1.608E-07
SW	1.392E-05	4.043E-06	1.999E-06	1.248E-06	6.700E-07	4.337E-07	3.098E-07	2.396E-07	1.928E-07	1.597E-07	1.351E-07
WSW	1.585E-05	4.572E-06	2.234E-06	1.387E-06	7.407E-07	4.786E-07	3.418E-07	2.655E-07	2.145E-07	1.782E-07	1.512E-07
W	1.651E-05	4.739E-06	2.306E-06	1.431E-06	7.657E-07	4.960E-07	3.550E-07	2.766E-07	2.241E-07	1.865E-07	1.585E-07
WNW	1.695E-05	4.854E-06	2.352E-06	1.457E-06	7.811E-07	5.070E-07	3.634E-07	2.836E-07	2.300E-07	1.917E-07	1.630E-07
NW	1.488E-05	4.299E-06	2.109E-06	1.313E-06	7.031E-07	4.550E-07	3.252E-07	2.525E-07	2.039E-07	1.693E-07	1.436E-07
NNW	1.082E-05	3.167E-06	1.590E-06	9.997E-07	5.393E-07	3.492E-07	2.493E-07	1.918E-07	1.536E-07	1.267E-07	1.068E-07
N	8.368E-06	2.487E-06	1.282E-06	8.159E-07	4.447E-07	2.887E-07	2.060E-07	1.571E-07	1.248E-07	1.022E-07	8.564E-08
NNE	6.594E-06	1.958E-06	1.008E-06	6.402E-07	3.444E-07	2.216E-07	1.572E-07	1.196E-07	9.489E-08	7.761E-08	6.496E-08
NE	4.824E-06	1.444E-06	7.481E-07	4.753E-07	2.548E-07	1.633E-07	1.155E-07	8.738E-08	6.900E-08	5.620E-08	4.688E-08
ENE	4.230E-06	1.255E-06	6.379E-07	4.015E-07	2.154E-07	1.385E-07	9.825E-08	7.474E-08	5.931E-08	4.851E-08	4.062E-08
E	5.886E-06	1.709E-06	8.433E-07	5.257E-07	2.812E-07	1.816E-07	1.295E-07	1.001E-07	8.059E-08	6.672E-08	5.645E-08
ESE	1.792E-05	5.113E-06	2.461E-06	1.519E-06	8.100E-07	5.245E-07	3.756E-07	2.937E-07	2.387E-07	1.992E-07	1.697E-07
SE	4.694E-05	1.334E-05	6.376E-06	3.925E-06	2.084E-06	1.348E-06	9.653E-07	7.579E-07	6.183E-07	5.177E-07	4.423E-07
SSE	2.401E-05	6.871E-06	3.325E-06	2.060E-06	1.098E-06	7.107E-07	5.086E-07	3.975E-07	3.230E-07	2.695E-07	2.295E-07

TABLE 2CC-215
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for a 8.00 day decay, depleted, for each 22.5° sector at the distances (miles) shown at the top
 Page 2 of 3

Sector	5	7.5	10	15	20	25	30	35	40	45	50
S	1.501E-07	8.514E-08	5.642E-08	3.124E-08	2.033E-08	1.446E-08	1.088E-08	8.515E-09	6.856E-09	5.643E-09	4.725E-09
SSW	1.387E-07	7.825E-08	5.168E-08	2.849E-08	1.849E-08	1.312E-08	9.854E-09	7.697E-09	6.189E-09	5.087E-09	4.256E-09
SW	1.163E-07	6.527E-08	4.297E-08	2.361E-08	1.531E-08	1.086E-08	8.158E-09	6.376E-09	5.131E-09	4.222E-09	3.535E-09
WSW	1.304E-07	7.384E-08	4.887E-08	2.702E-08	1.757E-08	1.248E-08	9.385E-09	7.337E-09	5.903E-09	4.855E-09	4.062E-09
W	1.370E-07	7.805E-08	5.189E-08	2.887E-08	1.887E-08	1.347E-08	1.016E-08	7.976E-09	6.440E-09	5.315E-09	4.462E-09
WNW	1.410E-07	8.048E-08	5.357E-08	2.984E-08	1.951E-08	1.393E-08	1.051E-08	8.250E-09	6.661E-09	5.496E-09	4.614E-09
NW	1.239E-07	7.017E-08	4.650E-08	2.580E-08	1.686E-08	1.204E-08	9.100E-09	7.153E-09	5.786E-09	4.784E-09	4.026E-09
NNW	9.164E-08	5.089E-08	3.328E-08	1.814E-08	1.171E-08	8.294E-09	6.225E-09	4.864E-09	3.915E-09	3.223E-09	2.701E-09
N	7.309E-08	3.977E-08	2.563E-08	1.371E-08	8.736E-09	6.126E-09	4.564E-09	3.545E-09	2.840E-09	2.329E-09	1.945E-09
NNE	5.541E-08	3.010E-08	1.939E-08	1.036E-08	6.604E-09	4.630E-09	3.448E-09	2.677E-09	2.143E-09	1.756E-09	1.465E-09
NE	3.988E-08	2.147E-08	1.375E-08	7.306E-09	4.652E-09	3.263E-09	2.433E-09	1.892E-09	1.518E-09	1.247E-09	1.044E-09
ENE	3.467E-08	1.890E-08	1.221E-08	6.567E-09	4.217E-09	2.975E-09	2.228E-09	1.739E-09	1.399E-09	1.152E-09	9.662E-10
E	4.860E-08	2.732E-08	1.801E-08	9.922E-09	6.451E-09	4.589E-09	3.456E-09	2.707E-09	2.184E-09	1.801E-09	1.511E-09
ESE	1.470E-07	8.438E-08	5.639E-08	3.160E-08	2.076E-08	1.487E-08	1.127E-08	8.867E-09	7.179E-09	5.940E-09	4.999E-09
SE	3.839E-07	2.224E-07	1.496E-07	8.467E-08	5.603E-08	4.041E-08	3.079E-08	2.437E-08	1.983E-08	1.649E-08	1.394E-08
SSE	1.987E-07	1.140E-07	7.612E-08	4.264E-08	2.800E-08	2.007E-08	1.521E-08	1.197E-08	9.698E-09	8.028E-09	6.759E-09

TABLE 2CC-215
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 Annual Average X/Q (sec/m³) for a 8.00 day decay, depleted, for each 22.5° sector for each segment (miles) shown at the top
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Sector	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.706E-06	8.760E-07	3.983E-07	2.471E-07	1.742E-07	8.681E-08	3.199E-08	1.460E-08	8.559E-09	5.662E-09
SSW	2.525E-06	8.206E-07	3.716E-07	2.295E-07	1.612E-07	7.986E-08	2.920E-08	1.324E-08	7.739E-09	5.106E-09
SW	2.119E-06	6.934E-07	3.147E-07	1.936E-07	1.354E-07	6.669E-08	2.422E-08	1.096E-08	6.411E-09	4.237E-09
WSW	2.377E-06	7.679E-07	3.478E-07	2.152E-07	1.515E-07	7.532E-08	2.767E-08	1.260E-08	7.376E-09	4.872E-09
W	2.458E-06	7.936E-07	3.612E-07	2.248E-07	1.589E-07	7.953E-08	2.954E-08	1.359E-08	8.016E-09	5.332E-09
WNW	2.510E-06	8.094E-07	3.698E-07	2.307E-07	1.633E-07	8.196E-08	3.052E-08	1.405E-08	8.291E-09	5.514E-09
NW	2.242E-06	7.283E-07	3.307E-07	2.046E-07	1.439E-07	7.159E-08	2.643E-08	1.215E-08	7.188E-09	4.800E-09
NNW	1.678E-06	5.571E-07	2.529E-07	1.542E-07	1.071E-07	5.212E-08	1.865E-08	8.378E-09	4.891E-09	3.235E-09
N	1.343E-06	4.579E-07	2.085E-07	1.254E-07	8.590E-08	4.089E-08	1.415E-08	6.197E-09	3.568E-09	2.338E-09
NNE	1.056E-06	3.555E-07	1.593E-07	9.537E-08	6.517E-08	3.096E-08	1.070E-08	4.684E-09	2.694E-09	1.763E-09
NE	7.815E-07	2.632E-07	1.170E-07	6.938E-08	4.705E-08	2.213E-08	7.558E-09	3.301E-09	1.904E-09	1.252E-09
ENE	6.699E-07	2.226E-07	9.958E-08	5.960E-08	4.075E-08	1.943E-08	6.777E-09	3.008E-09	1.750E-09	1.157E-09
E	8.946E-07	2.912E-07	1.316E-07	8.089E-08	5.659E-08	2.791E-08	1.018E-08	4.632E-09	2.722E-09	1.807E-09
ESE	2.632E-06	8.407E-07	3.825E-07	2.394E-07	1.700E-07	8.585E-08	3.229E-08	1.500E-08	8.909E-09	5.959E-09
SE	6.835E-06	2.166E-06	9.844E-07	6.198E-07	4.430E-07	2.259E-07	8.637E-08	4.073E-08	2.447E-08	1.654E-08
SSE	3.551E-06	1.140E-06	5.181E-07	3.239E-07	2.300E-07	1.160E-07	4.358E-08	2.024E-08	1.203E-08	8.053E-09

TABLE 2CC-216
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 D/Q (m⁻²) at each 22.5° sector for each distance (miles) shown at the top
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Sector	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	4.5
S	3.387E-08	1.145E-08	5.881E-09	3.611E-09	1.800E-09	1.092E-09	7.383E-10	5.350E-10	4.068E-10	3.213E-10	2.595E-10
SSW	3.661E-08	1.238E-08	6.357E-09	3.903E-09	1.946E-09	1.180E-09	7.980E-10	5.782E-10	4.397E-10	3.464E-10	2.804E-10
SW	3.561E-08	1.204E-08	6.182E-09	3.796E-09	1.893E-09	1.148E-09	7.761E-10	5.624E-10	4.276E-10	3.369E-10	2.727E-10
WSW	3.164E-08	1.070E-08	5.494E-09	3.374E-09	1.682E-09	1.020E-09	6.897E-10	4.998E-10	3.800E-10	2.994E-10	2.424E-10
W	2.642E-08	8.935E-09	4.588E-09	2.817E-09	1.404E-09	8.518E-10	5.759E-10	4.173E-10	3.173E-10	2.500E-10	2.024E-10
WNW	2.493E-08	8.429E-09	4.328E-09	2.658E-09	1.325E-09	8.036E-10	5.433E-10	3.937E-10	2.994E-10	2.358E-10	1.909E-10
NW	3.196E-08	1.081E-08	5.549E-09	3.407E-09	1.699E-09	1.030E-09	6.965E-10	5.047E-10	3.838E-10	3.024E-10	2.448E-10
NNW	3.264E-08	1.104E-08	5.668E-09	3.480E-09	1.735E-09	1.052E-09	7.115E-10	5.156E-10	3.920E-10	3.089E-10	2.500E-10
N	3.640E-08	1.231E-08	6.320E-09	3.881E-09	1.935E-09	1.173E-09	7.934E-10	5.749E-10	4.371E-10	3.444E-10	2.788E-10
NNE	4.124E-08	1.395E-08	7.161E-09	4.397E-09	2.192E-09	1.330E-09	8.989E-10	6.514E-10	4.953E-10	3.902E-10	3.159E-10
NE	3.871E-08	1.309E-08	6.722E-09	4.127E-09	2.058E-09	1.248E-09	8.438E-10	6.114E-10	4.649E-10	3.663E-10	2.965E-10
ENE	2.622E-08	8.868E-09	4.553E-09	2.796E-09	1.394E-09	8.453E-10	5.715E-10	4.142E-10	3.149E-10	2.481E-10	2.009E-10
E	1.803E-08	6.096E-09	3.130E-09	1.922E-09	9.582E-10	5.812E-10	3.929E-10	2.847E-10	2.165E-10	1.706E-10	1.381E-10
ESE	3.804E-08	1.286E-08	6.605E-09	4.056E-09	2.022E-09	1.226E-09	8.292E-10	6.008E-10	4.569E-10	3.599E-10	2.914E-10
SE	8.618E-08	2.914E-08	1.496E-08	9.188E-09	4.581E-09	2.778E-09	1.878E-09	1.361E-09	1.035E-09	8.154E-10	6.601E-10
SSE	4.048E-08	1.369E-08	7.029E-09	4.316E-09	2.152E-09	1.305E-09	8.823E-10	6.394E-10	4.862E-10	3.830E-10	3.101E-10

TABLE 2CC-216
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 D/Q (m⁻²) at each 22.5° sector for each distance (miles) shown at the top
 Page 2 of 3

Sector	5	7.5	10	15	20	25	30	35	40	45	50
S	2.146E-10	1.052E-10	6.599E-11	3.336E-11	2.019E-11	1.354E-11	9.699E-12	7.283E-12	5.663E-12	4.523E-12	3.692E-12
SSW	2.320E-10	1.137E-10	7.133E-11	3.605E-11	2.182E-11	1.463E-11	1.048E-11	7.872E-12	6.121E-12	4.889E-12	3.991E-12
SW	2.256E-10	1.106E-10	6.937E-11	3.506E-11	2.122E-11	1.423E-11	1.020E-11	7.656E-12	5.952E-12	4.755E-12	3.881E-12
WSW	2.005E-10	9.825E-11	6.164E-11	3.116E-11	1.886E-11	1.264E-11	9.060E-12	6.803E-12	5.290E-12	4.225E-12	3.449E-12
W	1.674E-10	8.204E-11	5.148E-11	2.602E-11	1.575E-11	1.056E-11	7.566E-12	5.681E-12	4.417E-12	3.528E-12	2.880E-12
WNW	1.579E-10	7.740E-11	4.856E-11	2.455E-11	1.486E-11	9.961E-12	7.137E-12	5.359E-12	4.167E-12	3.329E-12	2.717E-12
NW	2.025E-10	9.923E-11	6.226E-11	3.147E-11	1.905E-11	1.277E-11	9.150E-12	6.871E-12	5.342E-12	4.268E-12	3.483E-12
NNW	2.068E-10	1.014E-10	6.360E-11	3.214E-11	1.946E-11	1.304E-11	9.347E-12	7.019E-12	5.457E-12	4.359E-12	3.558E-12
N	2.306E-10	1.130E-10	7.091E-11	3.584E-11	2.169E-11	1.455E-11	1.042E-11	7.826E-12	6.085E-12	4.861E-12	3.968E-12
NNE	2.613E-10	1.281E-10	8.035E-11	4.061E-11	2.458E-11	1.648E-11	1.181E-11	8.868E-12	6.895E-12	5.508E-12	4.495E-12
NE	2.453E-10	1.202E-10	7.542E-11	3.812E-11	2.307E-11	1.547E-11	1.108E-11	8.324E-12	6.472E-12	5.170E-12	4.220E-12
ENE	1.661E-10	8.142E-11	5.109E-11	2.582E-11	1.563E-11	1.048E-11	7.509E-12	5.638E-12	4.384E-12	3.502E-12	2.858E-12
E	1.142E-10	5.598E-11	3.512E-11	1.775E-11	1.074E-11	7.204E-12	5.162E-12	3.876E-12	3.014E-12	2.407E-12	1.965E-12
ESE	2.410E-10	1.181E-10	7.411E-11	3.746E-11	2.267E-11	1.520E-11	1.089E-11	8.179E-12	6.360E-12	5.080E-12	4.147E-12
SE	5.460E-10	2.676E-10	1.679E-10	8.486E-11	5.136E-11	3.444E-11	2.468E-11	1.853E-11	1.441E-11	1.151E-11	9.394E-12
SSE	2.565E-10	1.257E-10	7.887E-11	3.986E-11	2.413E-11	1.618E-11	1.159E-11	8.704E-12	6.768E-12	5.406E-12	4.413E-12

TABLE 2CC-216
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 D/Q (m⁻²) at each 22.5° sector for each segment (miles) shown at the top
 Page 3 of 3

Sector	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.111E-09	1.888E-09	7.513E-10	4.106E-10	2.609E-10	1.121E-10	3.476E-11	1.378E-11	7.356E-12	4.553E-12
SSW	6.605E-09	2.041E-09	8.120E-10	4.437E-10	2.820E-10	1.211E-10	3.757E-11	1.489E-11	7.951E-12	4.921E-12
SW	6.424E-09	1.985E-09	7.897E-10	4.316E-10	2.743E-10	1.178E-10	3.653E-11	1.448E-11	7.733E-12	4.786E-12
WSW	5.708E-09	1.764E-09	7.018E-10	3.835E-10	2.437E-10	1.047E-10	3.247E-11	1.287E-11	6.872E-12	4.253E-12
W	4.767E-09	1.473E-09	5.860E-10	3.202E-10	2.035E-10	8.743E-11	2.711E-11	1.075E-11	5.738E-12	3.552E-12
WNW	4.497E-09	1.389E-09	5.529E-10	3.021E-10	1.920E-10	8.248E-11	2.558E-11	1.014E-11	5.413E-12	3.351E-12
NW	5.765E-09	1.781E-09	7.088E-10	3.873E-10	2.462E-10	1.057E-10	3.279E-11	1.300E-11	6.940E-12	4.296E-12
NNW	5.889E-09	1.819E-09	7.240E-10	3.956E-10	2.515E-10	1.080E-10	3.349E-11	1.328E-11	7.089E-12	4.388E-12
N	6.567E-09	2.029E-09	8.073E-10	4.412E-10	2.804E-10	1.204E-10	3.735E-11	1.480E-11	7.905E-12	4.893E-12
NNE	7.441E-09	2.299E-09	9.147E-10	4.999E-10	3.177E-10	1.365E-10	4.232E-11	1.677E-11	8.957E-12	5.544E-12
NE	6.984E-09	2.158E-09	8.586E-10	4.692E-10	2.982E-10	1.281E-10	3.972E-11	1.574E-11	8.407E-12	5.204E-12
ENE	4.731E-09	1.462E-09	5.816E-10	3.178E-10	2.020E-10	8.677E-11	2.691E-11	1.066E-11	5.695E-12	3.525E-12
E	3.252E-09	1.005E-09	3.999E-10	2.185E-10	1.389E-10	5.965E-11	1.850E-11	7.331E-12	3.915E-12	2.423E-12
ESE	6.863E-09	2.120E-09	8.438E-10	4.611E-10	2.930E-10	1.259E-10	3.903E-11	1.547E-11	8.261E-12	5.113E-12
SE	1.555E-08	4.803E-09	1.911E-09	1.045E-09	6.639E-10	2.852E-10	8.843E-11	3.505E-11	1.872E-11	1.158E-11
SSE	7.303E-09	2.256E-09	8.979E-10	4.907E-10	3.118E-10	1.340E-10	4.154E-11	1.646E-11	8.791E-12	5.441E-12

TABLE 2CC-217
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for no decay undepleted, at each receptor location
 Page 1 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) No Decay Undepleted	D/Q (m ⁻²)
		(miles)	(meters)		
EAB	S	0.87	1395	2.30E-06	4.60E-09
EAB	SSW	0.87	1395	2.10E-06	5.00E-09
EAB	SW	0.96	1547	1.50E-06	4.10E-09
EAB	WSW	1.02	1649	1.50E-06	3.20E-09
EAB	W	0.75	1208	2.60E-06	4.60E-09
EAB	WNW	0.75	1208	2.60E-06	4.30E-09
EAB	NW	0.75	1215	2.30E-06	5.50E-09
EAB	NNW	0.42	668	4.80E-06	1.50E-08
EAB	N	0.4	644	4.00E-06	1.80E-08
EAB	NNE	0.4	644	3.10E-06	2.00E-08
EAB	NE	0.44	705	2.00E-06	1.60E-08
EAB	ENE	0.59	952	1.00E-06	6.70E-09
EAB	E	0.8	1282	8.60E-07	2.80E-09
EAB	ESE	0.96	1544	1.90E-06	4.40E-09
EAB	SE	0.83	1339	6.00E-06	1.30E-08
EAB	SSE	0.83	1339	3.20E-06	5.90E-09
House	S	1	1614	1.80E-06	3.60E-09
House	SSW	1.1	1775	1.50E-06	3.30E-09
House	SW	1.26	2020	1.00E-06	2.60E-09
House	WSW	2.45	3948	4.40E-07	7.10E-10
House	W	1.79	2878	7.00E-07	1.00E-09
House	WNW	2.2	3534	5.40E-07	6.80E-10

TABLE 2CC-217
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for no decay undepleted, at each receptor location
 Page 2 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) No Decay Undepleted	D/Q (m ⁻²)
		(miles)	(meters)		
House	NW	2.04	3289	5.40E-07	9.90E-10
House	NNW	1.39	2242	7.10E-07	2.00E-09
House	N	1.05	1687	8.70E-07	3.60E-09
House	NNE	1.4	2255	4.50E-07	2.50E-09
House	NE	1.14	1829	4.50E-07	3.30E-09
House	ENE	1.14	1835	3.80E-07	2.20E-09
House	E	1.24	1997	4.40E-07	1.30E-09
House	ESE	2.42	3893	4.90E-07	8.80E-10
House	SE	1	1610	4.50E-06	9.20E-09
House	SSE	1.1	1773	2.00E-06	3.70E-09
Garden	S	1	1610	1.80E-06	3.60E-09
Garden	SSW	1.2	1927	1.30E-06	2.90E-09
Garden	SW	1.26	2020	1.00E-06	2.60E-09
Garden	WSW	2.46	3959	4.30E-07	7.10E-10
Garden	W	2.2	3534	5.30E-07	7.20E-10
Garden	WNW	2.54	4094	4.40E-07	5.30E-10
Garden	NW	2.02	3258	5.40E-07	1.00E-09
Garden	NNW	1.51	2431	6.30E-07	1.70E-09
Garden	N	1.4	2246	5.80E-07	2.20E-09
Garden	NNE	1.37	2203	4.60E-07	2.60E-09
Garden	NE	1.11	1794	4.60E-07	3.40E-09
Garden	ENE	0.97	1567	4.80E-07	2.90E-09

TABLE 2CC-217
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for no decay undepleted, at each receptor location
 Page 3 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) No Decay Undepleted	D/Q (m ⁻²)
		(miles)	(meters)		
Garden	E	2.78	4469	1.40E-07	3.30E-10
Garden	ESE	2.71	4355	4.20E-07	7.20E-10
Garden	SE	4.1	6591	6.60E-07	7.80E-10
Garden	SSE	1.01	1627	2.30E-06	4.20E-09
Milk Cow or Goat	S	3.25	5223	3.50E-07	4.70E-10
Milk Cow or Goat	SSW	1.06	1705	1.60E-06	3.50E-09
Milk Cow or Goat	SW	1.22	1959	1.10E-06	2.70E-09
Milk Cow or Goat	WSW	2.79	4494	3.70E-07	5.70E-10
Milk Cow or Goat	W	2.39	3850	4.70E-07	6.20E-10
Milk Cow or Goat	WNW	2.5	4016	4.50E-07	5.50E-10
Milk Cow or Goat	NW	3.82	6143	2.40E-07	3.30E-10
Milk Cow or Goat	NNW	2.92	4700	2.50E-07	5.40E-10
Milk Cow or Goat	N	2.25	3629	3.00E-07	9.50E-10
Milk Cow or Goat	NNE	3.39	5449	1.30E-07	5.30E-10
Milk Cow or Goat	NE	1.46	2356	3.10E-07	2.10E-09
Milk Cow or Goat	ENE	1.22	1957	3.40E-07	2.00E-09
Milk Cow or Goat	E	3.06	4926	1.20E-07	2.70E-10
Milk Cow or Goat	ESE	3.12	5017	3.60E-07	5.60E-10
Milk Cow or Goat	SE	1.66	2670	2.10E-06	3.80E-09
Milk Cow or Goat	SSE	1.09	1749	2.10E-06	3.70E-09
Animal for Meat	S	3.25	5223	3.50E-07	4.70E-10
Animal for Meat	SSW	1.06	1705	1.60E-06	3.50E-09

TABLE 2CC-217
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for no decay undepleted, at each receptor location
 Page 4 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) No Decay Undepleted	D/Q (m ⁻²)
		(miles)	(meters)		
Animal for Meat	SW	1.22	1959	1.10E-06	2.70E-09
Animal for Meat	WSW	2.79	4494	3.70E-07	5.70E-10
Animal for Meat	W	2.39	3850	4.70E-07	6.20E-10
Animal for Meat	WNW	2.5	4016	4.50E-07	5.50E-10
Animal for Meat	NW	3.82	6143	2.40E-07	3.30E-10
Animal for Meat	NNW	2.92	4700	2.50E-07	5.40E-10
Animal for Meat	N	2.25	3629	3.00E-07	9.50E-10
Animal for Meat	NNE	3.39	5449	1.30E-07	5.30E-10
Animal for Meat	NE	1.46	2356	3.10E-07	2.10E-09
Animal for Meat	ENE	1.22	1957	3.40E-07	2.00E-09
Animal for Meat	E	3.06	4926	1.20E-07	2.70E-10
Animal for Meat	ESE	3.12	5017	3.60E-07	5.60E-10
Animal for Meat	SE	1.66	2670	2.10E-06	3.80E-09
Animal for Meat	SSE	1.09	1749	2.10E-06	3.70E-09

TABLE 2CC-218
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for 2.26 day decay, undepleted, and 8.00 day decay, depleted, at each receptor location
 Page 1 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) 2.26 Day Decay Undepleted	X/Q (sec/m ³) 8.00 Day Decay Depleted	D/Q (m ⁻²)
		(miles)	(meters)			
EAB	S	0.87	1395	2.20E-06	2.00E-06	4.60E-09
EAB	SSW	0.87	1395	2.10E-06	1.90E-06	5.00E-09
EAB	SW	0.96	1547	1.50E-06	1.30E-06	4.10E-09
EAB	WSW	1.02	1649	1.50E-06	1.30E-06	3.20E-09
EAB	W	0.75	1208	2.60E-06	2.30E-06	4.60E-09
EAB	WNW	0.75	1208	2.60E-06	2.30E-06	4.30E-09
EAB	NW	0.75	1215	2.30E-06	2.10E-06	5.50E-09
EAB	NNW	0.42	668	4.80E-06	4.40E-06	1.50E-08
EAB	N	0.4	644	4.00E-06	3.60E-06	1.80E-08
EAB	NNE	0.4	644	3.10E-06	2.90E-06	2.00E-08
EAB	NE	0.44	705	2.00E-06	1.80E-06	1.60E-08
EAB	ENE	0.59	952	1.00E-06	9.40E-07	6.70E-09
EAB	E	0.8	1282	8.60E-07	7.60E-07	2.80E-09
EAB	ESE	0.96	1544	1.80E-06	1.60E-06	4.40E-09
EAB	SE	0.83	1339	6.00E-06	5.30E-06	1.30E-08
EAB	SSE	0.83	1339	3.10E-06	2.80E-06	5.90E-09
House	S	1	1614	1.80E-06	1.60E-06	3.60E-09
House	SSW	1.1	1775	1.40E-06	1.30E-06	3.30E-09
House	SW	1.26	2020	1.00E-06	8.80E-07	2.60E-09
House	WSW	2.45	3948	4.30E-07	3.50E-07	7.10E-10
House	W	1.79	2878	6.90E-07	5.90E-07	1.00E-09
House	WNW	2.2	3534	5.30E-07	4.40E-07	6.80E-10

TABLE 2CC-218
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for 2.26 day decay, undepleted, and 8.00 day decay, depleted, at each receptor location
 Page 2 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) 2.26 Day Decay Undepleted	X/Q (sec/m ³) 8.00 Day Decay Depleted	D/Q (m ⁻²)
		(miles)	(meters)			
House	NW	2.04	3289	5.30E-07	4.40E-07	9.90E-10
House	NNW	1.39	2242	7.00E-07	6.00E-07	2.00E-09
House	N	1.05	1687	8.70E-07	7.60E-07	3.60E-09
House	NNE	1.4	2255	4.40E-07	3.80E-07	2.50E-09
House	NE	1.14	1829	4.50E-07	3.90E-07	3.30E-09
House	ENE	1.14	1835	3.80E-07	3.30E-07	2.20E-09
House	E	1.24	1997	4.30E-07	3.80E-07	1.30E-09
House	ESE	2.42	3893	4.80E-07	3.90E-07	8.80E-10
House	SE	1	1610	4.50E-06	3.90E-06	9.20E-09
House	SSE	1.1	1773	2.00E-06	1.80E-06	3.70E-09
Garden	S	1	1610	1.80E-06	1.60E-06	3.60E-09
Garden	SSW	1.2	1927	1.30E-06	1.10E-06	2.90E-09
Garden	SW	1.26	2020	1.00E-06	8.80E-07	2.60E-09
Garden	WSW	2.46	3959	4.20E-07	3.50E-07	7.10E-10
Garden	W	2.2	3534	5.20E-07	4.30E-07	7.20E-10
Garden	WNW	2.54	4094	4.30E-07	3.50E-07	5.30E-10
Garden	NW	2.02	3258	5.30E-07	4.50E-07	1.00E-09
Garden	NNW	1.51	2431	6.20E-07	5.30E-07	1.70E-09
Garden	N	1.4	2246	5.80E-07	5.00E-07	2.20E-09
Garden	NNE	1.37	2203	4.60E-07	4.00E-07	2.60E-09
Garden	NE	1.11	1794	4.60E-07	4.00E-07	3.40E-09
Garden	ENE	0.97	1567	4.80E-07	4.20E-07	2.90E-09

TABLE 2CC-218
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for 2.26 day decay, undepleted, and 8.00 day decay, depleted, at each receptor location
 Page 3 of 4

Type of Location	Sector	Distance (miles)	Distance (meters)	X/Q (sec/m ³) 2.26 Day Decay Undepleted	X/Q (sec/m ³) 8.00 Day Decay Depleted	D/Q (m ⁻²)
Garden	E	2.78	4469	1.40E-07	1.10E-07	3.30E-10
Garden	ESE	2.71	4355	4.10E-07	3.40E-07	7.20E-10
Garden	SE	4.1	6591	6.40E-07	5.00E-07	7.80E-10
Garden	SSE	1.01	1627	2.30E-06	2.00E-06	4.20E-09
Milk Cow or Goat	S	3.25	5223	3.40E-07	2.70E-07	4.70E-10
Milk Cow or Goat	SSW	1.06	1705	1.50E-06	1.40E-06	3.50E-09
Milk Cow or Goat	SW	1.22	1959	1.10E-06	9.20E-07	2.70E-09
Milk Cow or Goat	WSW	2.79	4494	3.60E-07	2.90E-07	5.70E-10
Milk Cow or Goat	W	2.39	3850	4.60E-07	3.80E-07	6.20E-10
Milk Cow or Goat	WNW	2.5	4016	4.40E-07	3.60E-07	5.50E-10
Milk Cow or Goat	NW	3.82	6143	2.30E-07	1.80E-07	3.30E-10
Milk Cow or Goat	NNW	2.92	4700	2.50E-07	2.00E-07	5.40E-10
Milk Cow or Goat	N	2.25	3629	2.90E-07	2.40E-07	9.50E-10
Milk Cow or Goat	NNE	3.39	5449	1.30E-07	1.00E-07	5.30E-10
Milk Cow or Goat	NE	1.46	2356	3.10E-07	2.60E-07	2.10E-09
Milk Cow or Goat	ENE	1.22	1957	3.40E-07	3.00E-07	2.00E-09
Milk Cow or Goat	E	3.06	4926	1.20E-07	9.70E-08	2.70E-10
Milk Cow or Goat	ESE	3.12	5017	3.50E-07	2.80E-07	5.60E-10
Milk Cow or Goat	SE	1.66	2670	2.10E-06	1.80E-06	3.80E-09
Milk Cow or Goat	SSE	1.09	1749	2.10E-06	1.80E-06	3.70E-09
Animal for Meat	S	3.25	5223	3.40E-07	2.70E-07	4.70E-10
Animal for Meat	SSW	1.06	1705	1.50E-06	1.40E-06	3.50E-09

TABLE 2CC-218
 NORMAL RELEASE X/Q AND D/Q VALUES FOR TWO YEARS OF MET DATA
 X/Q and D/Q values for 2.26 day decay, undepleted, and 8.00 day decay, depleted, at each receptor location
 Page 4 of 4

Type of Location	Sector	Distance		X/Q (sec/m ³) 2.26 Day Decay Undepleted	X/Q (sec/m ³) 8.00 Day Decay Depleted	D/Q (m ⁻²)
		(miles)	(meters)			
Animal for Meat	SW	1.22	1959	1.10E-06	9.20E-07	2.70E-09
Animal for Meat	WSW	2.79	4494	3.60E-07	2.90E-07	5.70E-10
Animal for Meat	W	2.39	3850	4.60E-07	3.80E-07	6.20E-10
Animal for Meat	WNW	2.5	4016	4.40E-07	3.60E-07	5.50E-10
Animal for Meat	NW	3.82	6143	2.30E-07	1.80E-07	3.30E-10
Animal for Meat	NNW	2.92	4700	2.50E-07	2.00E-07	5.40E-10
Animal for Meat	N	2.25	3629	2.90E-07	2.40E-07	9.50E-10
Animal for Meat	NNE	3.39	5449	1.30E-07	1.00E-07	5.30E-10
Animal for Meat	NE	1.46	2356	3.10E-07	2.60E-07	2.10E-09
Animal for Meat	ENE	1.22	1957	3.40E-07	3.00E-07	2.00E-09
Animal for Meat	E	3.06	4926	1.20E-07	9.70E-08	2.70E-10
Animal for Meat	ESE	3.12	5017	3.50E-07	2.80E-07	5.60E-10
Animal for Meat	SE	1.66	2670	2.10E-06	1.80E-06	3.80E-09
Animal for Meat	SSE	1.09	1749	2.10E-06	1.80E-06	3.70E-09

TABLE 2CC-219
DELETED

TABLE 2CC-220
COMPARISON OF THE MAXIMUM INDIVIDUAL DOSE DUE TO NOBLE GASES

Description	Limit	One Year of Met Data Calculated Values	Two Years of Met Data Calculated Values	One Year of Met Data Ratio to the Limit	Two Years of Met Data Ratio to the Limit	Change in Margin
Noble Gases						
Gamma Dose (mrad/yr)	10	6.13E-01	7.36E-01	6.1%	7.4%	1.2%
Beta Dose (mrad/yr)	20	2.93E+00	3.09E+00	14.7%	15.5%	0.8%
Total Body Dose (mrem/yr)	5	3.70E-01	4.51E-01	7.4%	9.0%	1.6%
Skin Dose (mrem/yr)	15	2.06E+00	2.26E+00	13.7%	15.1%	1.3%

Note:

Doses from noble gases effluents were calculated at the point of maximum concentration at the EAB.

TABLE 2CC-221
POPULATION DOSE COMPARISON
Page 1 of 2

One Year of Met Data

Pathway	Dose (person-rem/yr)							
	Total Body	GI-Tract	Bone	Liver	Kidney	Thyroid	Lung	Skin
Plume	1.43E+00	1.43E+00	1.43E+00	1.43E+00	1.43E+00	1.43E+00	1.65E+00	1.43E+01
Ground	2.78E-01	2.78E-01	2.78E-01	2.78E-01	2.78E-01	2.78E-01	2.78E-01	3.26E-01
Inhalation	3.90E-01	3.91E-01	4.41E-02	3.97E-01	4.02E-01	2.99E+00	4.74E-01	3.82E-01
Vegetable	7.15E-01	7.14E-01	3.15E+00	7.17E-01	7.04E-01	7.29E-01	6.99E-01	6.97E-01
Cow Milk	2.59E-01	2.52E-01	1.08E+00	2.69E-01	2.62E-01	1.81E+00	2.51E-01	2.50E-01
Meat	1.72E+00	1.79E+00	7.72E+00	1.72E+00	1.71E+00	2.30E+00	1.70E+00	1.70E+00
Total	4.79E+00	4.85E+00	1.37E+01	4.81E+00	4.78E+00	9.52E+00	5.06E+00	1.76E+01
TEDE	5.08	person-rem/yr						

TABLE 2CC-221
POPULATION DOSE COMPARISON
Page 2 of 2

Two Years of Met Data

Pathway	Dose (person-rem/yr)							
	Total Body	GI-Tract	Bone	Liver	Kidney	Thyroid	Lung	Skin
Plume	1.44E+00	1.44E+00	1.44E+00	1.44E+00	1.44E+00	1.44E+00	1.68E+00	1.48E+01
Ground	2.75E-01	2.75E-01	2.75E-01	2.75E-01	2.75E-01	2.75E-01	2.75E-01	3.23E-01
Inhalation	4.07E-01	4.09E-01	4.58E-02	4.14E-01	4.19E-01	3.06E+00	4.95E-01	3.99E-01
Vegetable	7.55E-01	7.55E-01	3.31E+00	7.58E-01	7.44E-01	7.70E-01	7.40E-01	7.37E-01
Cow Milk	2.73E-01	2.66E-01	1.14E+00	2.83E-01	2.77E-01	1.82E+00	2.66E-01	2.64E-01
Meat	1.82E+00	1.89E+00	8.16E+00	1.82E+00	1.81E+00	2.39E+00	1.80E+00	1.80E+00
Total	4.97E+00	5.04E+00	1.44E+01	5.00E+00	4.97E+00	9.76E+00	5.26E+00	1.83E+01
Percent change from first year data	3.8%	3.9%	5.1%	4.0%	4.0%	2.5%	4.0%	4.0%
TEDE	5.26	person-rem/yr						
	3.7%	Percent Change						

FIGURE 2CC-201
 DRY BULB TEMPERATURE COMPARISON

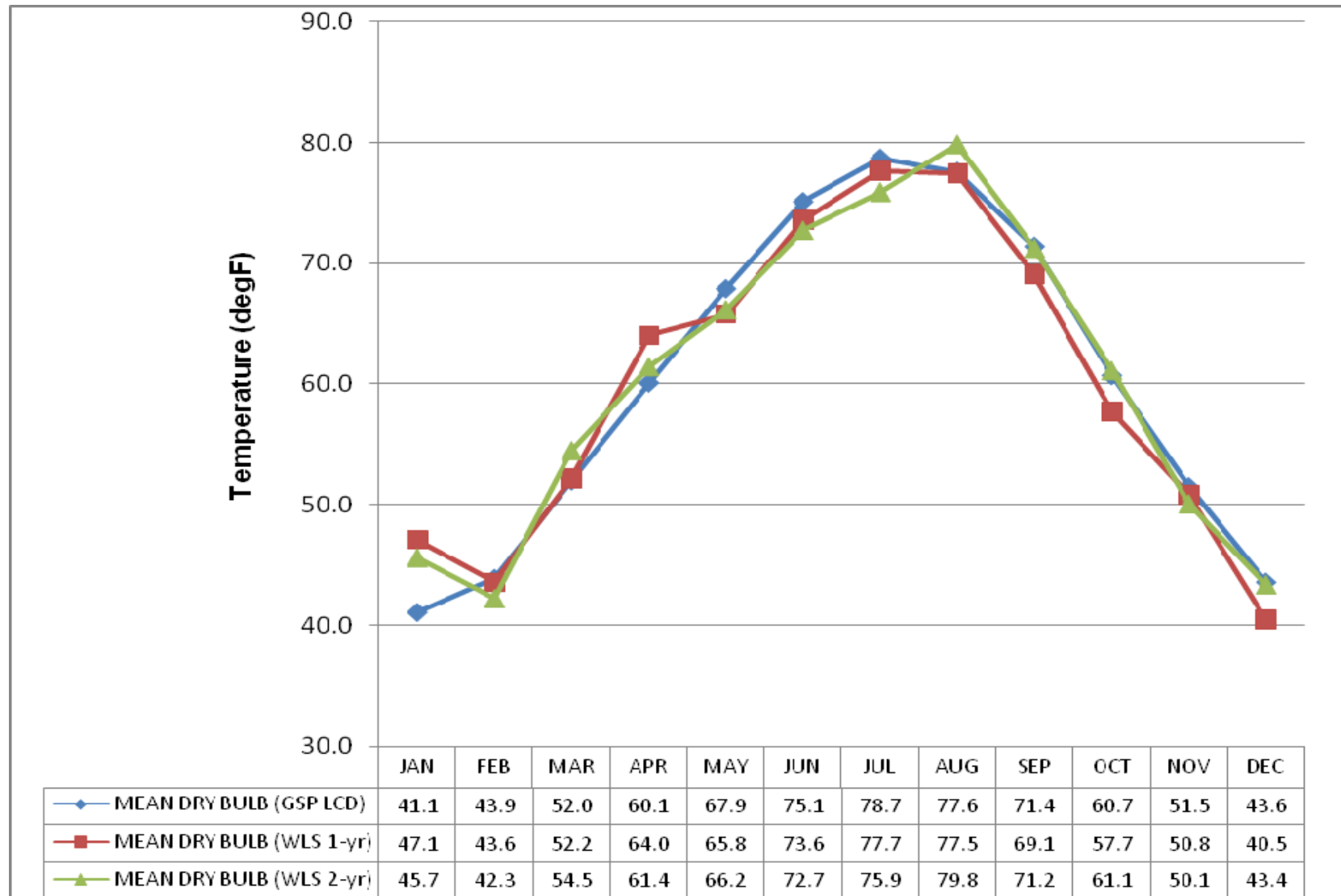


FIGURE 2CC-202
WET BULB TEMPERATURE COMPARISON

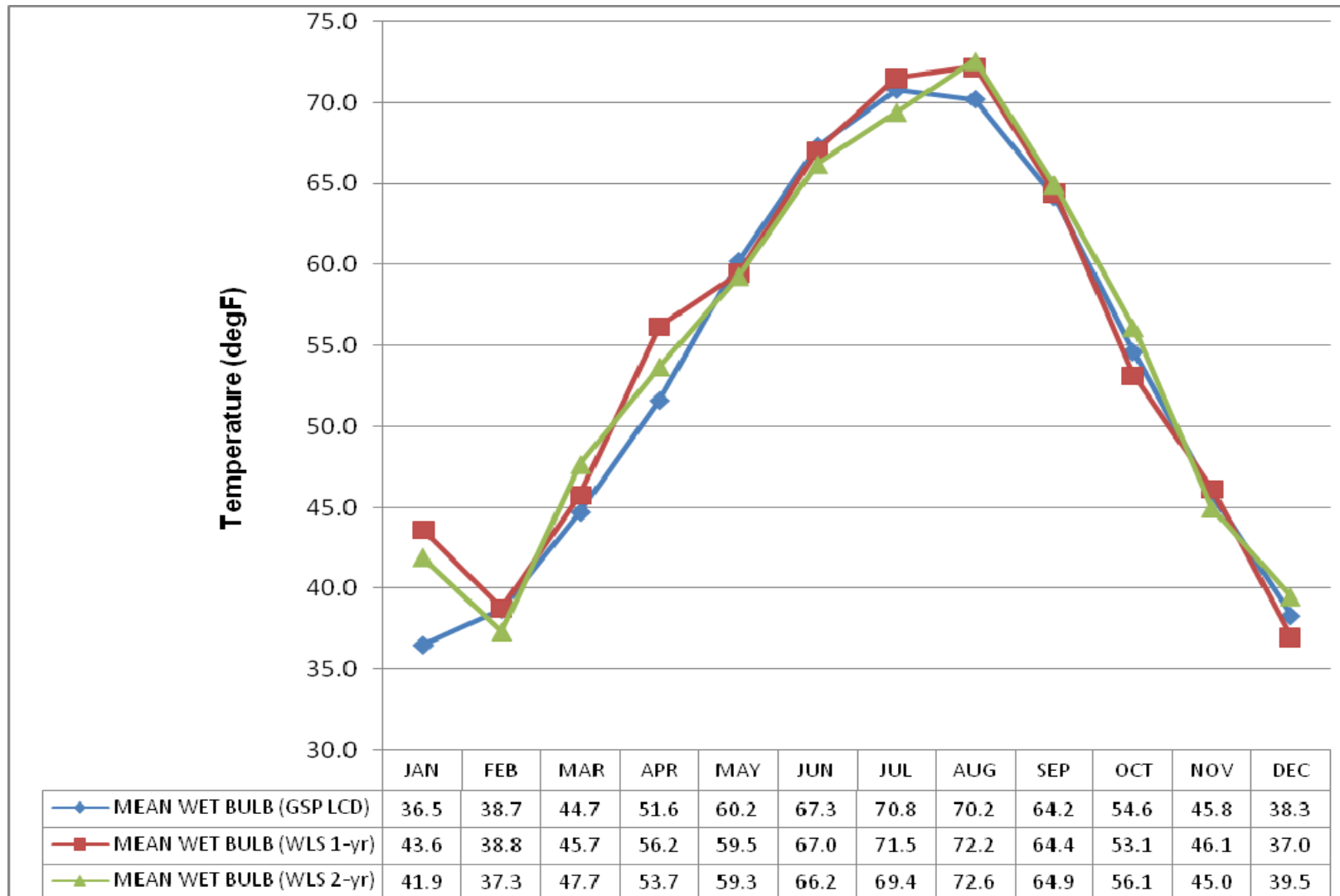


FIGURE 2CC-203
DEW POINT TEMPERATURE COMPARISON

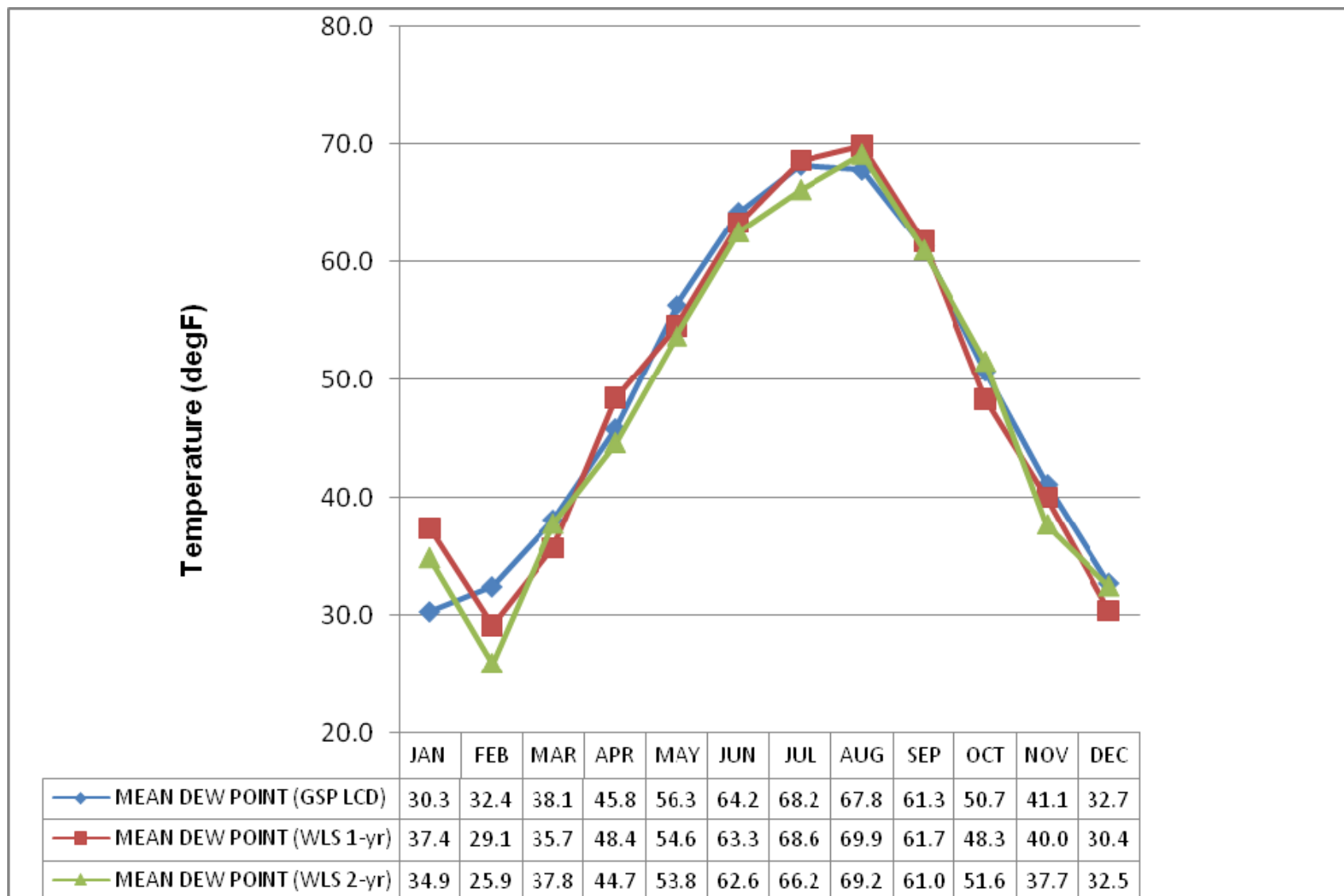


FIGURE 2CC-204
RELATIVE HUMIDITY COMPARISON

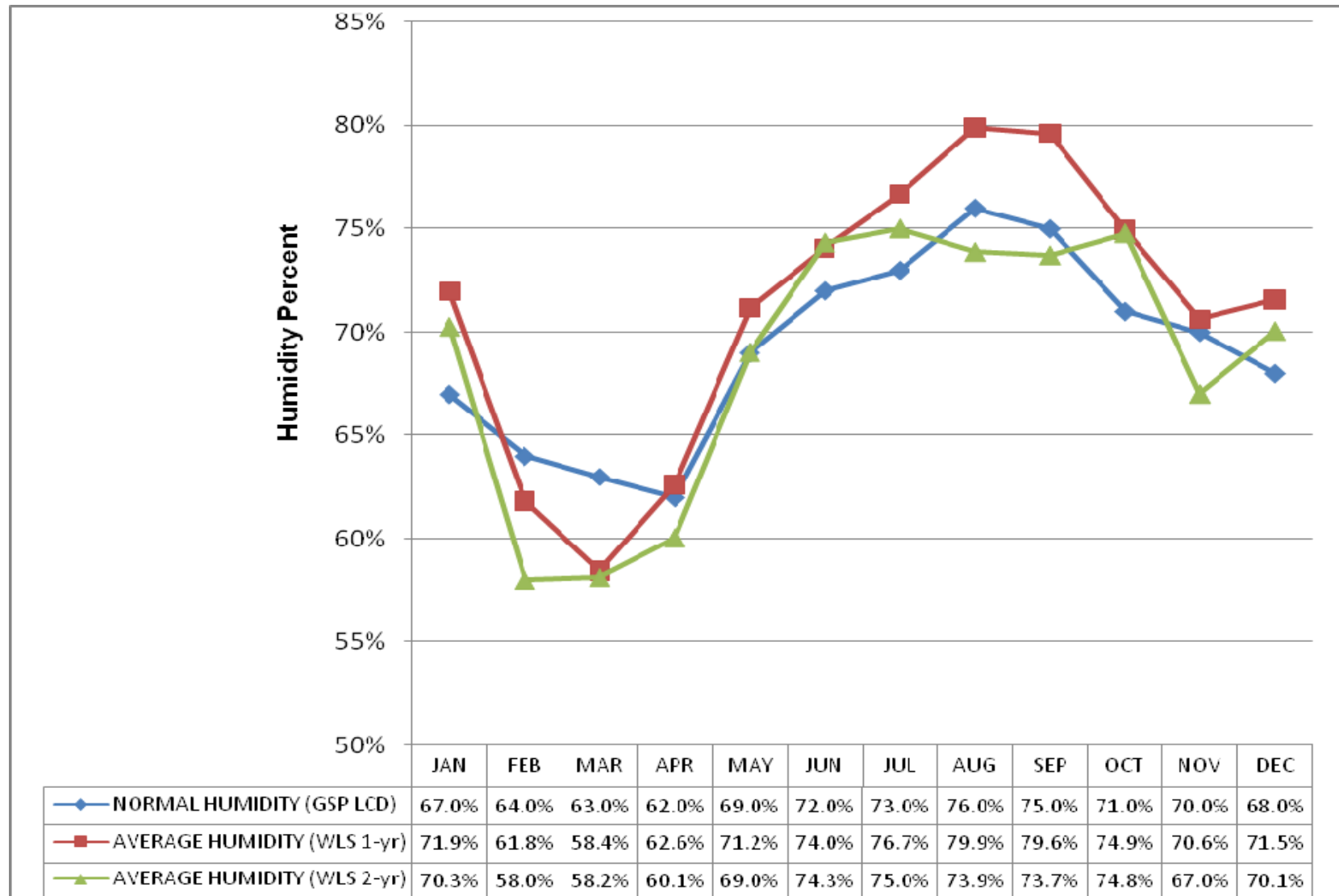


FIGURE 2CC-205
LEE NUCLEAR STATION STABILITY CLASS COMPARISON

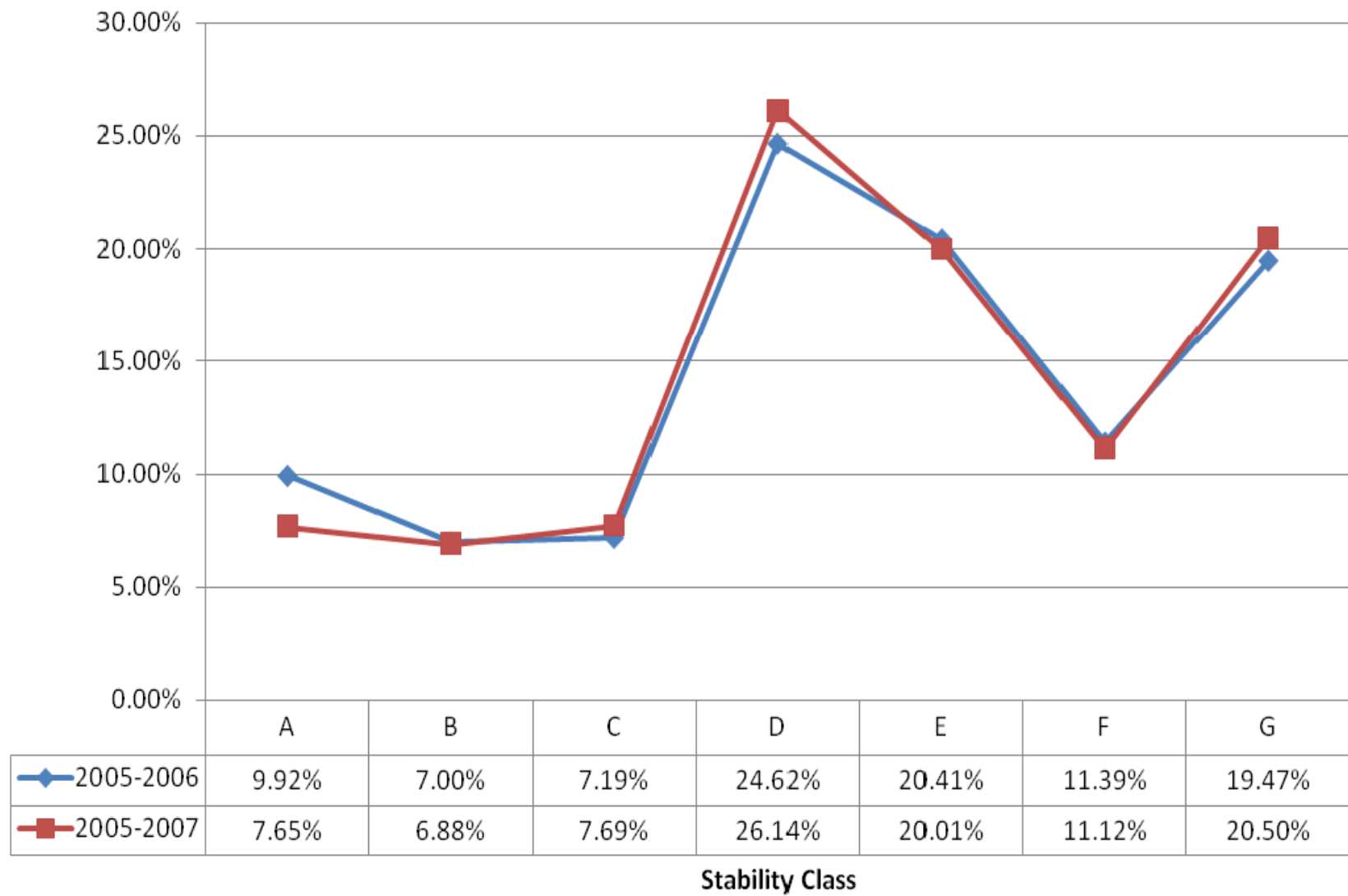


FIGURE 2CC-206
WIND SPEED FREQUENCY
(10 M LEVEL)

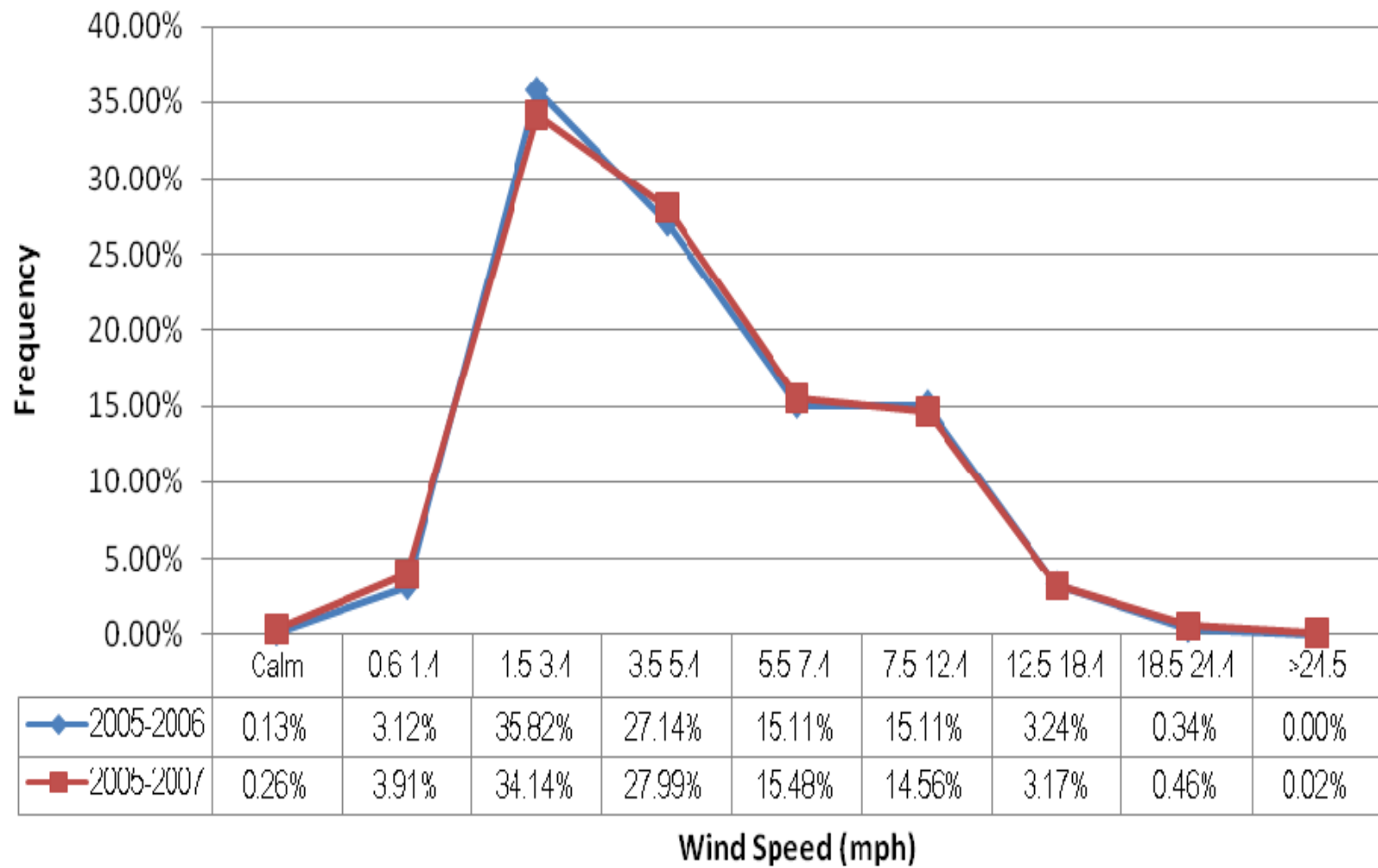


FIGURE 2CC-207
WIND SPEED FREQUENCY
(60 M LEVEL)

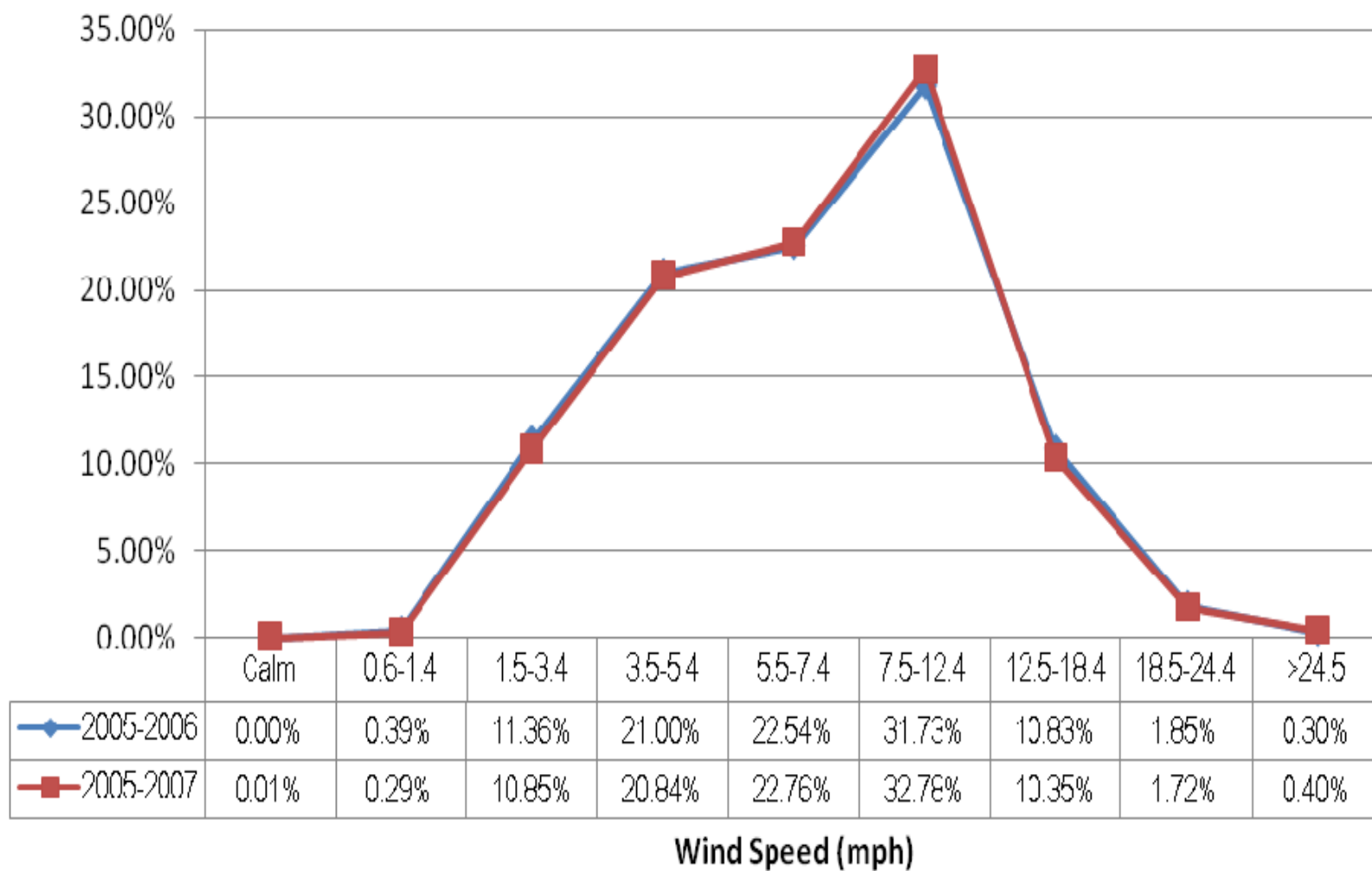


FIGURE 2CC-208
WIND DIRECTION FREQUENCY
(10 M LEVEL)

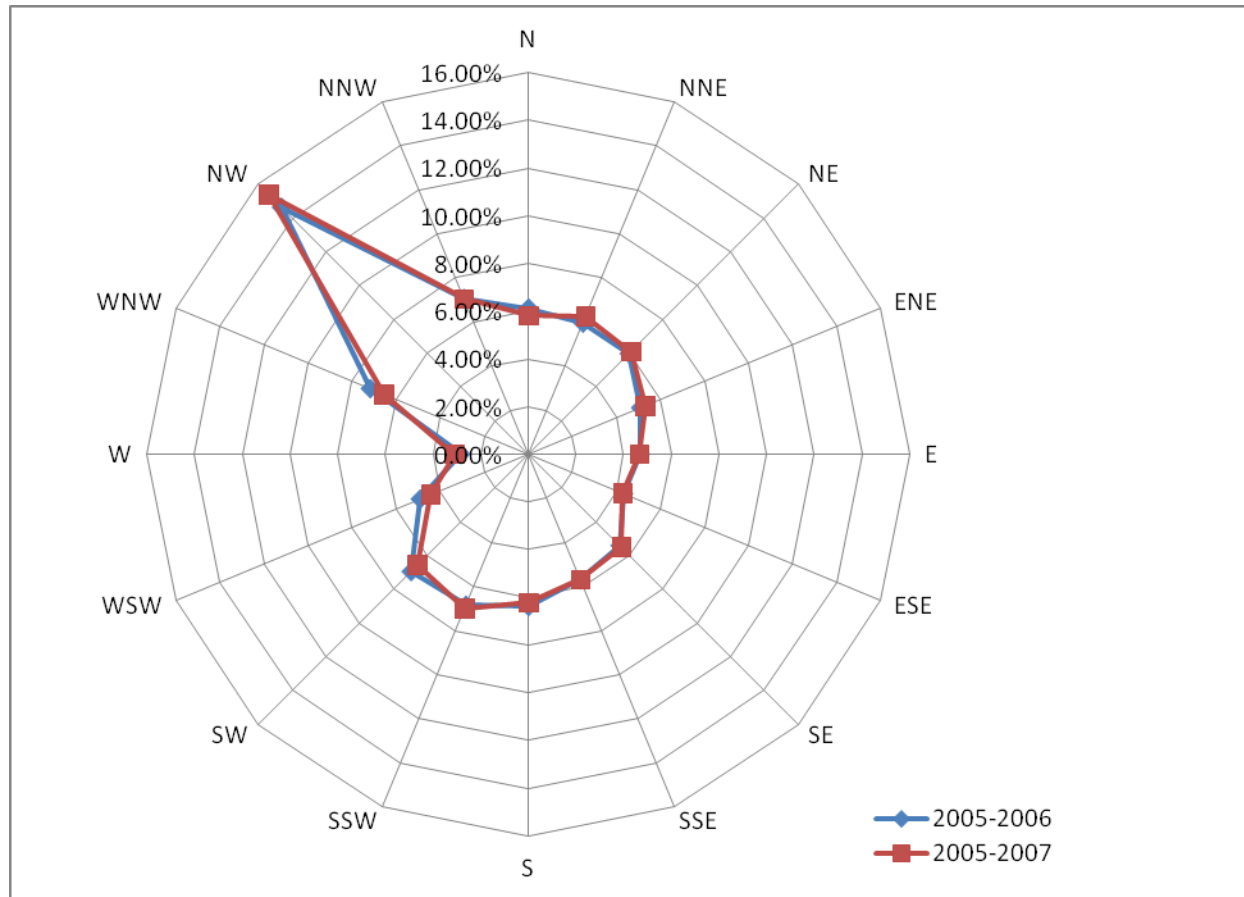


FIGURE 2CC-209
WIND DIRECTION FREQUENCY
(60 M LEVEL)

