

Wind Resource Summary for Unionville Site

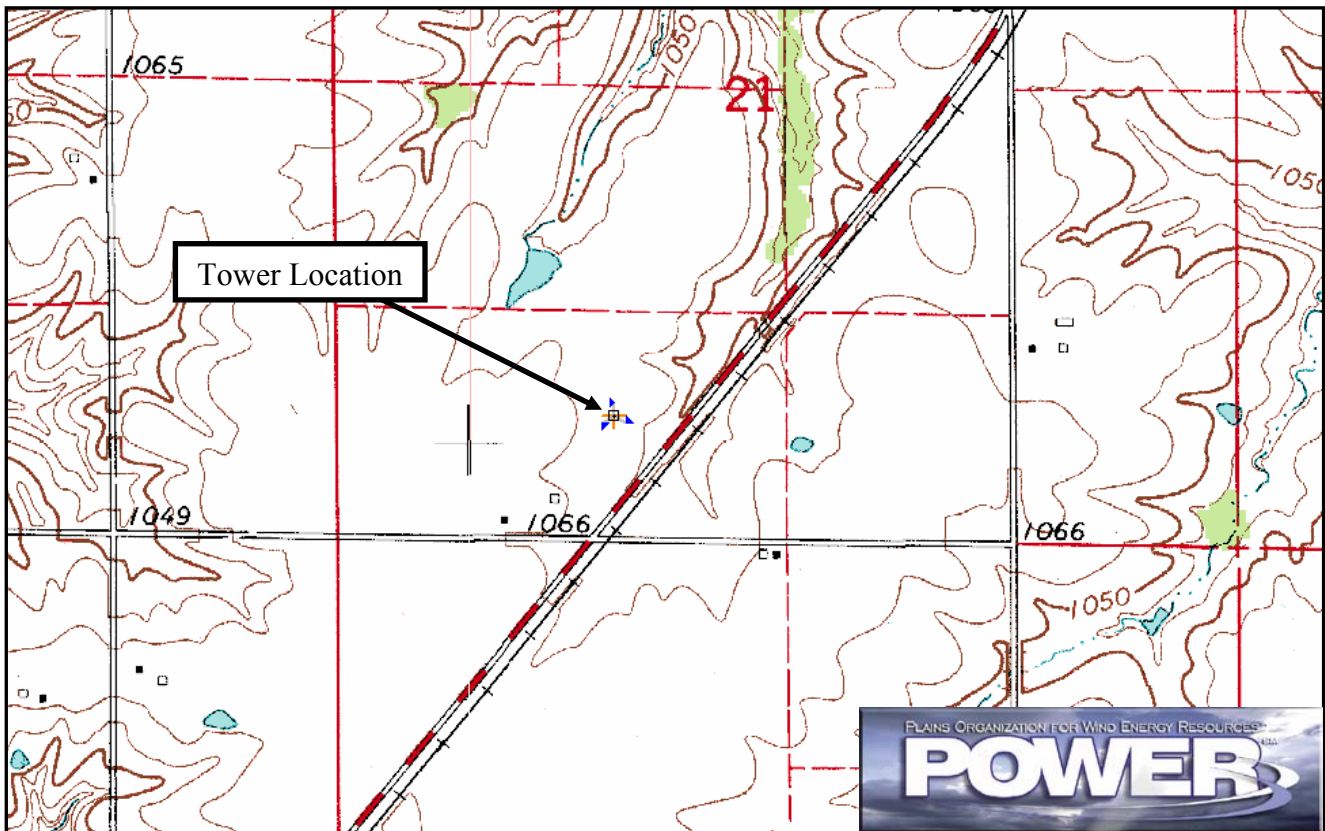
Plains Organization for Wind Energy Resources

Monitoring Period^a: 1/14/2005 – 12/2/2006

Site Description:

Latitude: N 40° 25' 8"	Township: 65 N
Longitude: W 93° 2' 20"	Range: 19 W
Elevation: 1063 feet	Section: 21
Tower Type: NRG Tilt-Up	Tower Height: 164 feet

The site is 4.3 miles southwest of the town of Unionville, Missouri. The tower is located on high ground between Blackbird Creek and Locust Creek. State Route 5 is one hundred yards to the east. The vegetation around the site is grass with trees lining the highway and in the draws to the north.



Summary Wind Data:	33 ft AGL ^b	98 ft AGL	164 ft AGL
Mean Wind Speed	8.9 mph	11.8 mph	13.7 mph
Maximum, 10-min Mean Wind Speed	45.0 mph at 164 ft AGL – 7/13/2006 6:50 p.m.		
Estimated Wind Power Class ^c	Class 2 (202 W/m ² at 164 ft AGL)		

^a Data recovery rates at 33, 98, and 164 feet were 97%, 97%, and 97%, respectively.

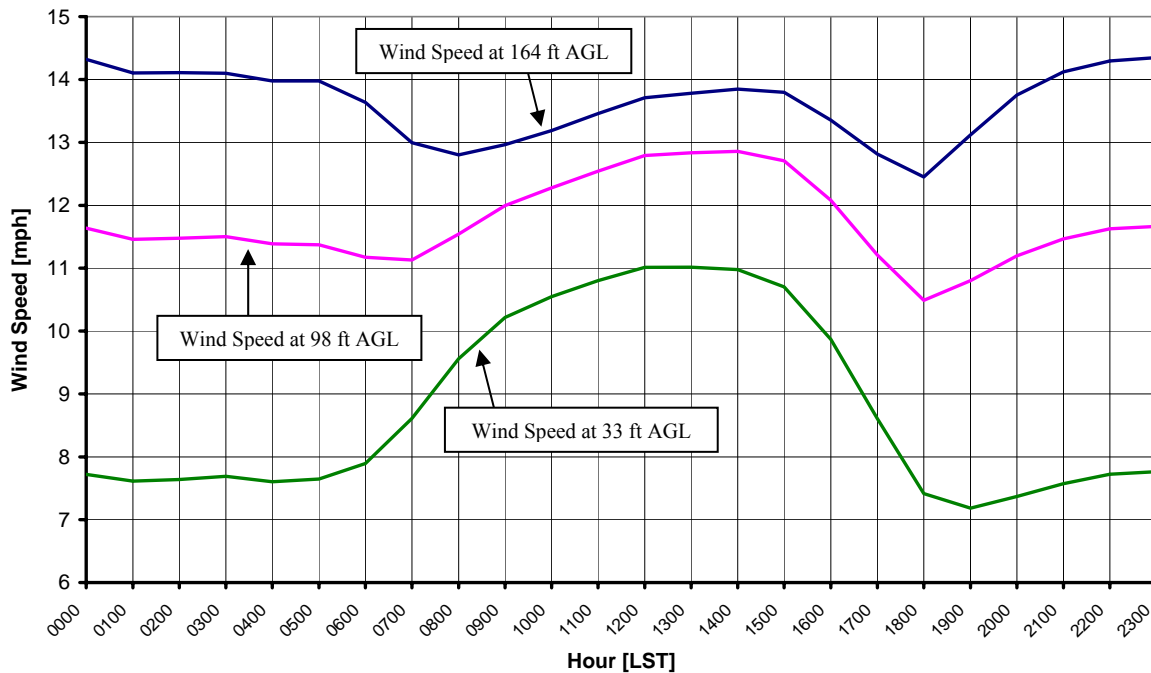
^b Above ground level.

^c Air temperature was not factored into calculations.

Average Hourly Wind Speeds

LST ^d	164 ft AGL		98 ft AGL		33 ft AGL	
	mph	m/s	mph	m/s	mph	m/s
0000	14.3	6.40	11.6	5.20	7.7	3.45
0100	14.1	6.30	11.5	5.12	7.6	3.40
0200	14.1	6.31	11.5	5.13	7.6	3.42
0300	14.1	6.30	11.5	5.14	7.7	3.44
0400	14.0	6.25	11.4	5.09	7.6	3.40
0500	14.0	6.25	11.4	5.08	7.6	3.42
0600	13.6	6.10	11.2	5.00	7.9	3.53
0700	13.0	5.81	11.1	4.98	8.6	3.85
0800	12.8	5.72	11.5	5.16	9.6	4.27
0900	13.0	5.80	12.0	5.36	10.2	4.57
1000	13.2	5.89	12.3	5.49	10.5	4.71
1100	13.5	6.02	12.5	5.61	10.8	4.83
1200	13.7	6.13	12.8	5.72	11.0	4.92
1300	13.8	6.16	12.8	5.74	11.0	4.92
1400	13.8	6.19	12.9	5.75	11.0	4.91
1500	13.8	6.17	12.7	5.68	10.7	4.78
1600	13.4	5.97	12.1	5.40	9.9	4.41
1700	12.8	5.73	11.2	5.01	8.6	3.85
1800	12.5	5.57	10.5	4.69	7.4	3.31
1900	13.1	5.87	10.8	4.83	7.2	3.21
2000	13.8	6.15	11.2	5.00	7.4	3.29
2100	14.1	6.31	11.5	5.13	7.6	3.39
2200	14.3	6.39	11.6	5.20	7.7	3.45
2300	14.4	6.42	11.7	5.21	7.8	3.47

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^d Local standard time.

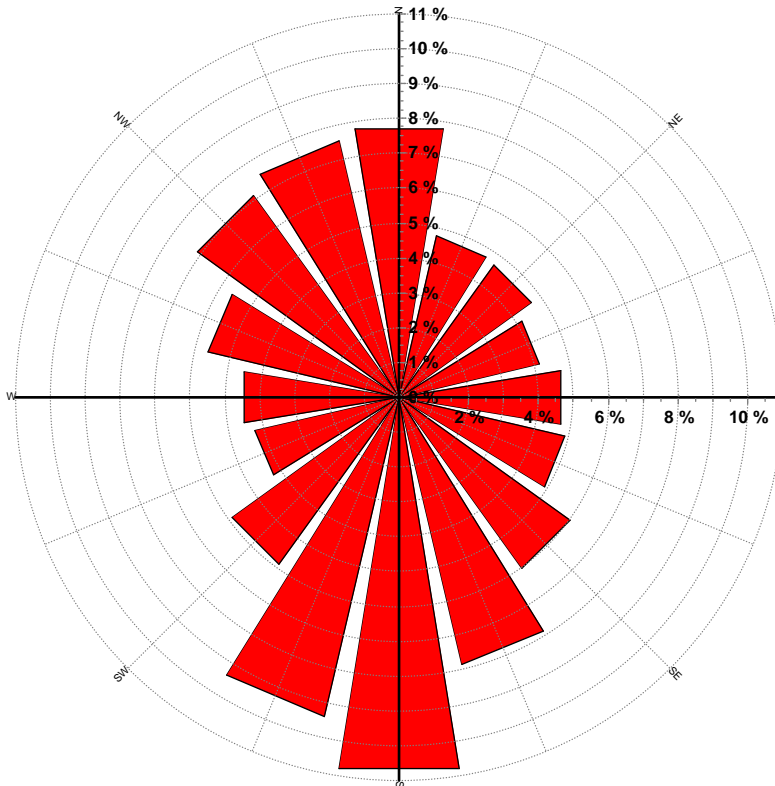


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Wind Directional Frequency

Winds from the...	Frequency (%)
NNW	7.5
NW	7.1
WNW	5.6
W	4.5
WSW	4.2
SW	5.9
SSW	9.4
S	10.8
SSE	7.9
SE	6.0
ESE	4.9
E	4.7
ENE	4.1
NE	4.7
NNE	4.8
N	7.8

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 Wind Rose for 164 ft AGL
 1/14/2005 – 12/2/2006



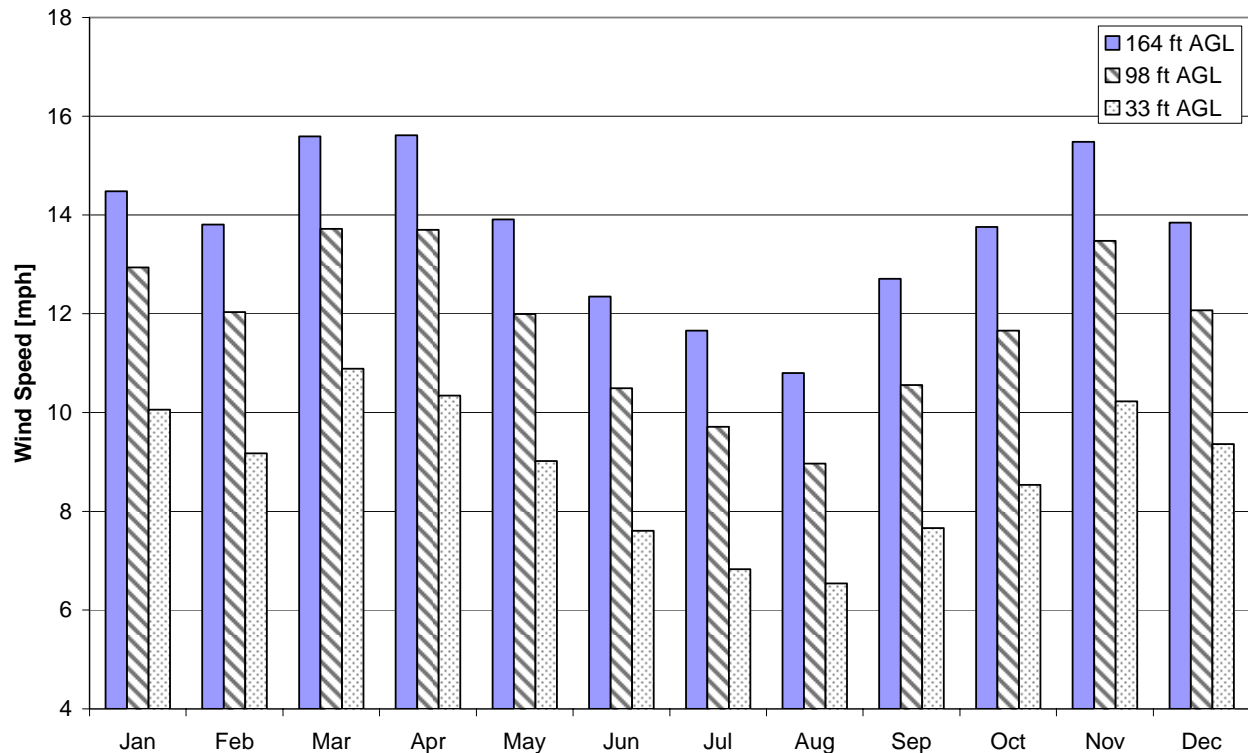
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Monthly Wind Speed Averages

Month	164 ft AGL		98 ft AGL		33 ft AGL	
	mph	m/s	mph	m/s	mph	m/s
Jan	14.5	6.47	12.9	5.78	10.1	4.50
Feb	13.8	6.17	12.0	5.38	9.2	4.10
Mar	15.6	6.97	13.7	6.13	10.9	4.87
Apr	15.6	6.98	13.7	6.12	10.3	4.62
May	13.9	6.22	12.0	5.36	9.0	4.03
Jun	12.4	5.52	10.5	4.69	7.6	3.40
Jul	11.7	5.21	9.7	4.34	6.8	3.05
Aug	10.8	4.83	9.0	4.01	6.5	2.92
Sep	12.7	5.68	10.6	4.72	7.7	3.42
Oct	13.8	6.15	11.7	5.21	8.5	3.82
Nov	15.5	6.92	13.5	6.02	10.2	4.57
Dec	13.8	6.19	12.1	5.39	9.4	4.19

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