

# Wind Resource Summary for Craig Site

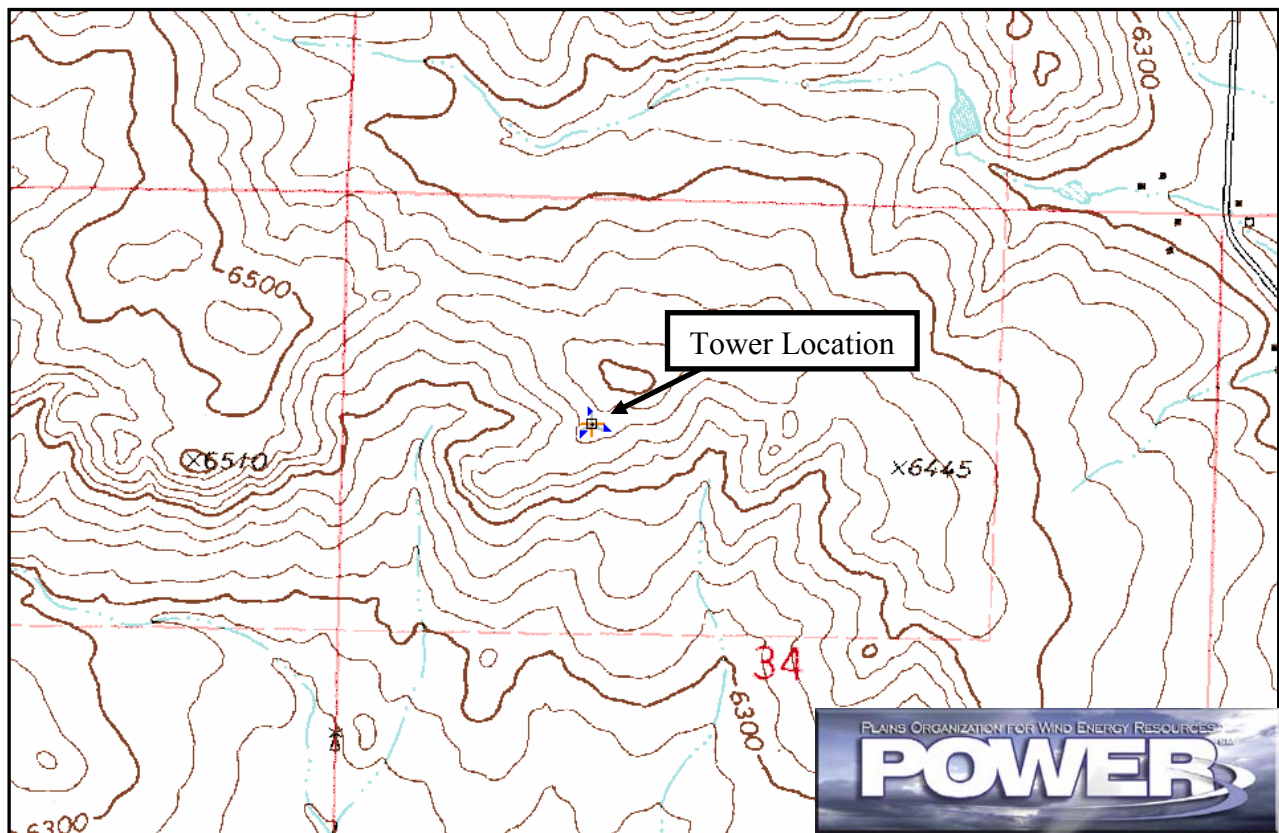
Colorado Anemometer Loan Program

Monitoring Period<sup>a</sup>: 7/26/2005 – 11/5/2006

## Site Description:

Latitude: N 40° 31' 29"	Township: 7 N
Longitude: W 107° 35' 44"	Range: 91 W
Elevation: 6470 feet	Section: 34
Tower Type: NRG Tilt-Up	Tower Height: 66 feet

The site is 2.6 miles west-northwest of the town of Craig, Colorado. The tower is located on the south side of a large hill. The Yampa River Valley lies south of the site. The hill will impact winds from the north, but the tower has good exposure to winds from the south. The vegetation around the site is predominately grass and sagebrush.



Summary Wind Data	66 ft AGL <sup>b</sup>
Mean Wind Speed	9.6 mph
Maximum, 10-min Mean Wind Speed	48.7 mph – 4/17/2006 11:40 a.m.
Estimated Wind Power Class <sup>c</sup>	Class 1 (97 W/m <sup>2</sup> )

<sup>a</sup> Data recovery rate was 99%.

<sup>b</sup> Above ground level.

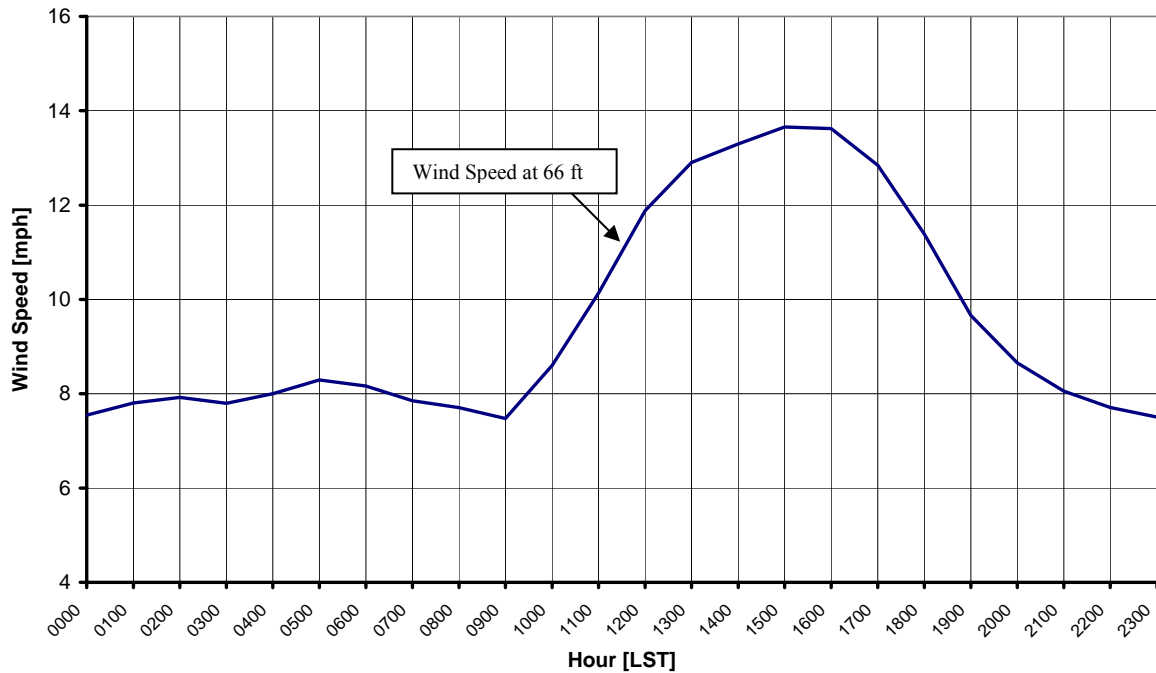
<sup>c</sup> Air temperature was not factored into calculation.

## Average Hourly Wind Speeds

66 ft AGL

LST <sup>d</sup>	mph	m/s
0000	7.5	3.37
0100	7.8	3.49
0200	7.9	3.54
0300	7.8	3.49
0400	8.0	3.58
0500	8.3	3.71
0600	8.2	3.65
0700	7.9	3.51
0800	7.7	3.44
0900	7.5	3.34
1000	8.6	3.85
1100	10.1	4.53
1200	11.9	5.31
1300	12.9	5.77
1400	13.3	5.94
1500	13.7	6.10
1600	13.6	6.09
1700	12.8	5.74
1800	11.4	5.09
1900	9.7	4.32
2000	8.7	3.87
2100	8.1	3.60
2200	7.7	3.45
2300	7.5	3.35

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<sup>d</sup> Local standard time.



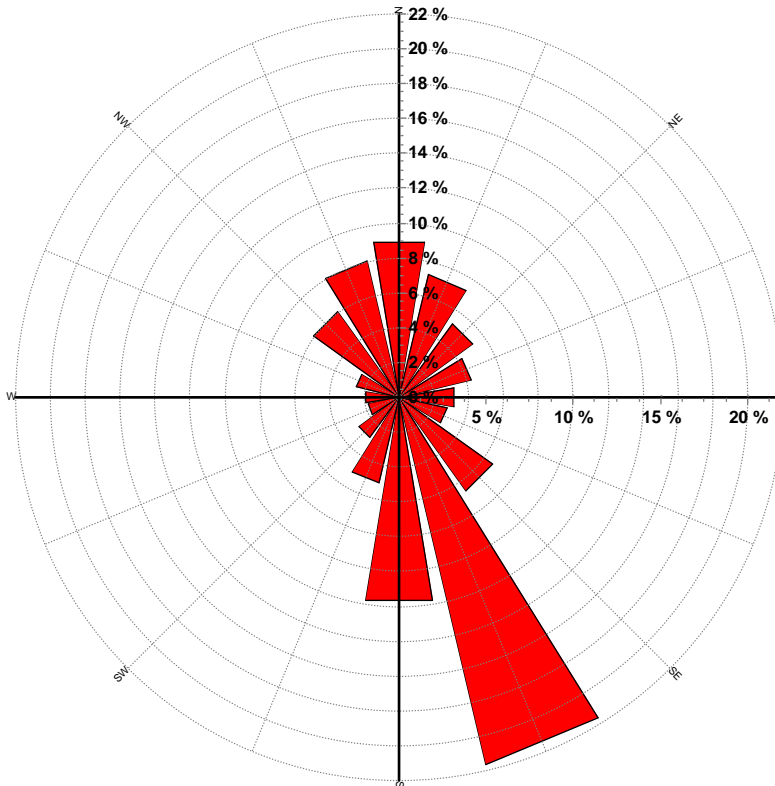
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Creation Date: 12/1/2006

## Wind Directional Frequency

Winds from the...	Frequency (%)
NNW	8.0
NW	6.0
WNW	2.5
W	1.9
WSW	1.8
SW	2.8
SSW	5.0
S	11.8
SSE	21.7
SE	6.6
ESE	2.8
E	3.2
ENE	4.2
NE	5.2
NNE	7.2
N	9.0

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 Wind Rose for 66 ft AGL  
 7/26/2005 – 11/5/2006



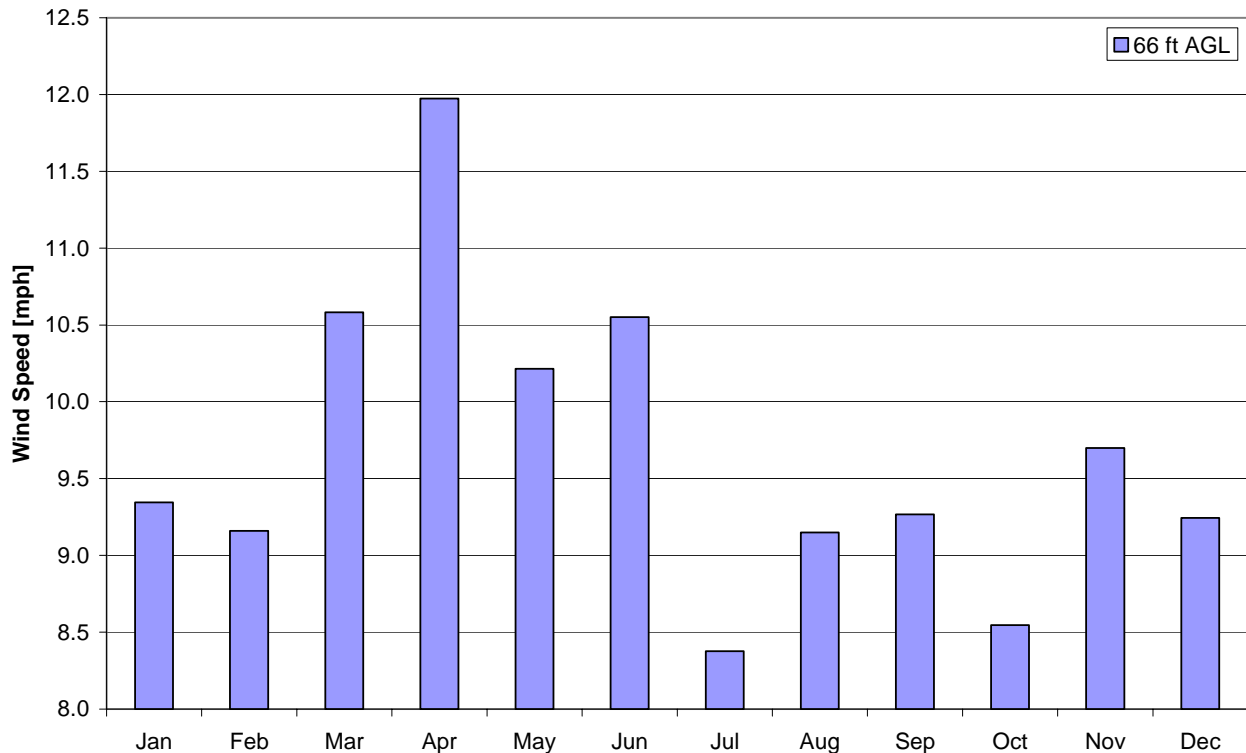
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## Monthly Wind Speed Averages

66 ft AGL

Month	mph	m/s
Jan	9.3	4.18
Feb	9.2	4.09
Mar	10.6	4.73
Apr	12.0	5.35
May	10.2	4.57
Jun	10.6	4.72
Jul	8.4	3.74
Aug	9.1	4.09
Sep	9.3	4.14
Oct	8.5	3.82
Nov	9.7	4.34
Dec	9.2	4.13

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