

Table 1-1 Classes of wind power density at 10 m and 50 m<sup>(a)</sup>.

Wind Power Class <sup>*</sup>	10 m (33 ft)		50 m (164 ft)	
	Wind Power Density (W/m <sup>2</sup> )	Speed <sup>(b)</sup> m/s (mph)	Wind Power Density (W/m <sup>2</sup> )	Speed <sup>(b)</sup> m/s (mph)
1	0	0	0	0
2	100	4.4 (9.8)	200	5.6 (12.5)
3	150	5.1 (11.5)	300	6.4 (14.3)
4	200	5.6 (12.5)	400	7.0 (15.7)
5	250	6.0 (13.4)	500	7.5 (16.8)
6	300	6.4 (14.3)	600	8.0 (17.9)
7	400	7.0 (15.7)	800	8.8 (19.7)
	1000	9.4 (21.1)	2000	11.9 (26.6)

(a) Vertical extrapolation of wind speed based on the 1/7 power law.

(b) Mean wind speed is based on Rayleigh speed distribution of equivalent mean wind power density. Wind speed is for standard sea-level conditions. To maintain the same power density, speed increases 3%/1000 m (5%/5000 ft) elevation.

\* WEB NOTE: Each wind power class should span two power densities. For example, Wind Power Class = 3 represents the Wind Power Density range between 150 W/m<sup>2</sup> and 200 W/m<sup>2</sup>. The offset cells in the first column attempt to illustrate this concept.

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