

Site specifics	OR site		TX site		CONUS median	
Location, region, and state	Condon, Columbia Gorge, OR		Bryson, northwest of Fort Worth, TX		5049 MERRA-2 grid points	
Nominal capacity (MW)	24.6		120		—	
Elevation at closest MERRA-2 grid point – elevation of actual wind farm (m)	−501.4		−67.4		—	
Horizontal distance between MERRA-2 location and actual location (km)	33.07		21.22		—	
$R^2$ of final linear regression	0.868		0.794		—	
Root mean square error of final linear regression (MWh)	1140.5		4185.0		—	
Pearson's $r$ between predicted and actual energy	0.906		0.809		—	
Variability metrics	Monthly mean	Annual mean	Monthly mean	Annual mean	Monthly mean	Annual mean
37-year wind-speed RCoV	0.082	0.029	0.094	0.023	0.102	0.021
37-year energy-production RCoV	0.226	0.059	0.166	0.041	—	—
Actual energy-production RCoV	0.233	0.067	0.212	0.055	—	—
37-year wind-speed $\frac{\text{range}}{\text{trimean}}$	0.893	0.129	0.596	0.122	2.066	1.316
37-year energy-production $\frac{\text{range}}{\text{trimean}}$	2.050	0.288	1.059	0.218	—	—
Actual energy-production $\frac{\text{range}}{\text{trimean}}$	1.768	0.307	1.303	0.305	—	—
37-year wind-speed CoV	0.134	0.036	0.127	0.031	0.143	0.031
37-year energy-production CoV	0.333	0.081	0.225	0.055	—	—
Actual energy-production CoV	0.341	0.088	0.279	0.089	—	—
37-year wind-speed $\sigma$	0.909	0.242	0.964	0.234	0.895	0.203
37-year energy-production $\sigma$	2.599	0.632	5.828	1.421	—	—
Actual energy-production $\sigma$	2.663	0.687	6.964	2.228	—	—
Other 37-year wind-speed diagnostics	Monthly mean	Annual mean	Monthly mean	Annual mean	Monthly mean	Annual mean
Mean ( $\text{m s}^{-1}$ )	6.79	6.79	7.59	7.59	6.45	6.45
Median ( $\text{m s}^{-1}$ )	6.64	6.79	7.63	7.57	6.51	6.45
Kurtosis	0.886	−0.962	−0.663	−0.872	−0.482	−0.373
Skewness	0.811	−0.129	−0.074	0.172	0.045	0.061
YKI	0.153	0.101	−0.072	0.041	−0.024	0.023
12-month-lag autocorrelation	0.324	0.039	0.525	−0.052	0.578	0.023