The wind power curve

1. Wind turbines operate above the cut-in speed, where wind is strong enough to turn the blades and generate power.

2. In the optimum power point tracking region the aim is to extract the maximum feasible amount of power.

3. A turbine is designed to operate up to a certain rated power, once this is reached generation is limited to the rated value.

4. At the cut-out speed the turbine shuts down to protect itself from the strong wind.