

Guidelines for setting Turbulence Intensity and System De-rate in the Wind Turbine Output Calculator

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For Turbulence Intensity:

Site Quality	Terrain	Turbulence Intensity Factor
Good	Well Exposed	15%
Average	Some Ground Clutter Scattered Trees, buildings	20%
Poor	Many Trees or Buildings, lower elevation than surroundings	25%
Very Poor	Urban or wooded	30%

System De-rate factor:

A system de-rate factor is used internally in the Seventh Wind Performance Calculator to account for losses due to the inverters used. This is not something an assessor needs to worry about, but should know.

System De-rate Factor	<p>5% for all inverter based systems</p> <p>0% for induction machines; e.g. Endurance and 35kW and larger.</p>
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