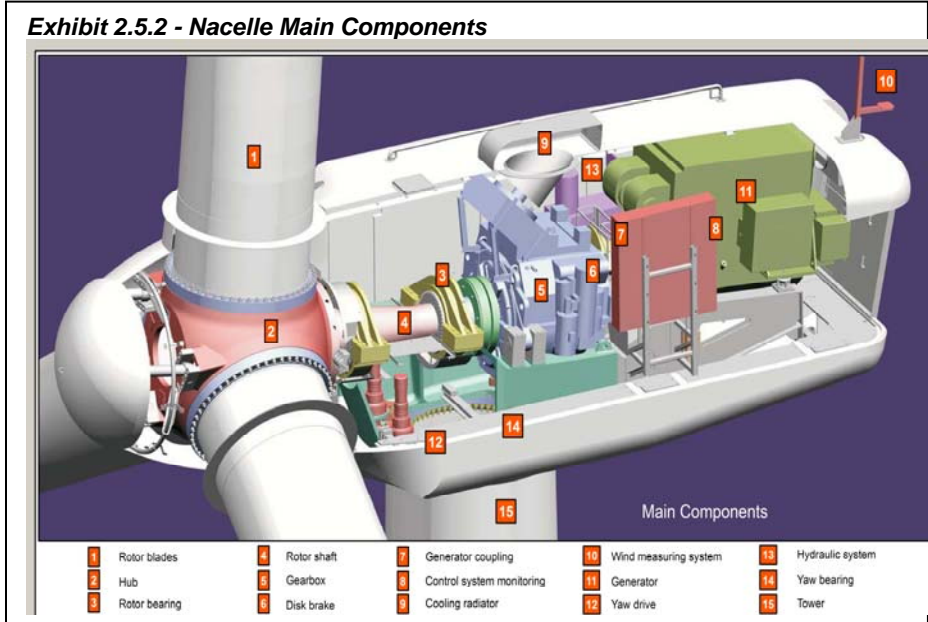


components of the WTG, which include the drive train, a gearbox and the generator. The nacelle sits atop the tower. A large flange protrudes from the front of the nacelle to which the hub is bolted. The rotor blades are all bolted to this central hub. Exhibit 2.5.2 provides a detail of the nacelle, hub and rotor assembly. A transformer will be located near the tower base, to raise the voltage of the electricity produced by the turbine generator to the voltage level of the collection system. The steel towers used for this Project will be manufactured in multiple sections. Each tower will have a locked access door and an internal safety ladder



to access the nacelle, and will be painted (off-white) to make the structure less visually obtrusive. Specifications for the turbines are presented in Table 2-1.

**Table 2-1
Turbine Specifications**

Type:	Acciona AW 82/1500 IEC IIIb T80A LM40.3P
Manufacturer:	Acciona Windpower, S.A.
Rated power:	1500 kW (1.5 MW)
Rotor manufacturer:	LM
Rotor blade type:	40.3P
Rotor diameter:	82.026 m (269.114 feet)
Rotor swept area:	5281 m ²
Number of rotor blades:	3
Rotor rated speed:	18.25 min ⁻¹
Hub height above ground:	80 m (~262 ft)
Measurement distance R ₀ :	113 m (~371 ft)

2.5.2 Turbine Spacing

Development of the Project layout has been an iterative process. The first step in siting the wind turbines for this Project was to assess the wind resource and place conceptual turbine locations where wind would appear to be the strongest and steadiest. Appropriate buffers (see Figure 2-2) from roads, property lines, residences, and sensitive environmental resources were taken into