

Borrego Wind Turbine Sound Standards

Borrego's mission is to solve the worlds energy needs by responsibly developing clean, renewable energy facilities. Part of that mission means ensuring that the projects do not adversely impact the local community. Several measures are taken to investigate the resulting sound levels of the systems being developed.

Turbine Siting

Parcels of land that are pursued for development must provide adequate space to allow for proper siting of the wind turbine. Two of the most important factors are distance from receptors (typically residences) as well as setbacks from property lines. Borrego strives to balance many site constraints while aiming to achieve the greatest distance possible from any sensitive receptors.

Turbine Certification

Sound levels emitted by all turbines specified by Borrego will be evaluated using International Electrotechnical Commission (IEC) 61400-11. This standard provides a uniform methodology that will ensure consistency and accuracy in the measurement and analysis of acoustical emissions by wind turbine generator systems. The adherence to this standard means that overseeing authorities can have a high degree of confidence in the published sound levels, and the resulting sound modeling. Borrego does not specify lower quality turbine manufacturers that do not adhere to this standard.

Manufacturers Guarantee

The turbine manufacturers Borrego partners with provide sound level warranties on their turbines. This means that if a turbine is operating outside of the stated Sound Level Performance Standard, the manufacturer will remedy the situation to ensure the turbine is operating at or below the Sound Level Performance Standard. This standard has been used in the Sound Level Modeling Report to ensure compliance with applicable local and state ordinances, and to ensure there will be no adverse effect to local residences. This sound level warranty brings with it sound level liquidated damages, which provide assurances that any turbine operating outside of its stated Sound Level Performance Standard will be swiftly corrected.

Sound Level Modeling Report

Borrego partners with Epsilon Associates to provide acoustic modeling reports for all our proposed wind turbine projects. Epsilon Associates is a recognized national leader in sound level studies for the wind industry. Epsilon Associates follow International Organization for Standardization (ISO) standards in their sound level modeling reports, which are used to ensure that wind turbines are responsibly located to minimize sound impacts to the community and ensure compliance with local and state requirements.