



XZERES 442SR Wind Energy System

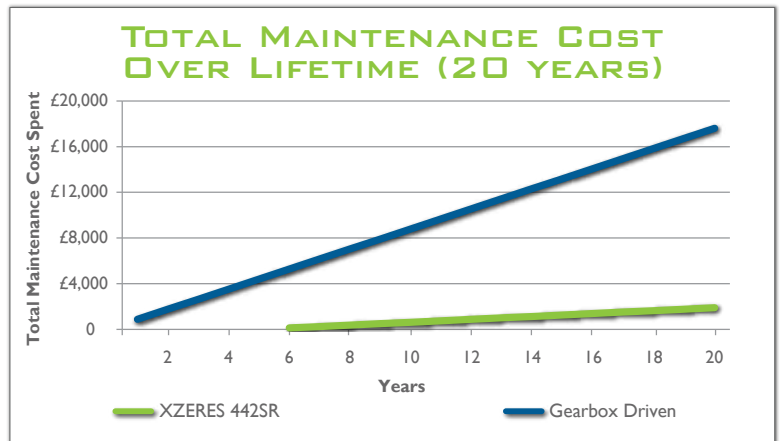
Simple, Rugged, Designed to Quietly Last

THE DIRECT-DRIVE ADVANTAGE

Many conventional wind turbines use a gearbox, which connects the blades to the generator and is one way to increase blade rotation speed in order to provide production of power in low to moderate wind speeds. XZERES turbines do not use a gearbox rather a direct-drive giving us a clear advantage over the competition. XZERES costs less than the competition and has lower maintenance costs.

Maintenance costs on wind turbines with gearboxes are much higher than those costs of turbines with a direct drive, and they cost more. Gearboxes use many cogs, wheels and bearings to work properly. A small defect in the gearbox can cause the wind turbine to stop completely. Reports of failures from gearbox driven wind turbines are not uncommon. The United States Department of Energy concluded that ‘most wind turbine gearboxes would fail “well before” their 20-year design life.’

Gearboxes have higher maintenance costs than direct-drive systems



XZERES TURBINE MAINTENANCE COSTS ARE COVERED FOR THE FIRST 5 YEARS INCLUDING SCHEDULED MAINTENANCE

 **Save 15-20% of installation cost over life of system**

 **Maximise turbine up time**

XZERES' direct-drive system wind turbine eliminates the need for a gearbox and connects the blades directly to the generator. This system causes the generator to rotate at the same speed as the blades and is just as efficient as those wind turbines with gearboxes PLUS it is lighter, economical and more reliable. Our intelligent direct drive design uses predictive regulated technology to maximize performance in all wind speeds.