Three turbine airfoils
could be more or fewer

Tension wires
connecting blade tips

Fixed, lower part of main column

Wind Turbine Electrical Stator in Arc

Wind Turbine carrying electrical generating components on the tips of three blades and in an arc-shaped stator. This greatly reduces the mass of the electrical generator, and, usually, a gearbox, high up in the nacelle. It should also reduce the total wind-turbine mass because the relative speeds of the rotor and stator are near optimum levels without a gearbox. Much less maintenance would be required, and should be much less costly because of the easier lower-level accessibility. The noise level should be much reduced because the downstream components can be streamlined so that they will not produce vortices from the wakes of the turbine blades

Blade Tips
a permanent magnet or a stack of iron laminations at the end of each blade

Nacelle
carries no generator components nor gearbox. It would incorporate just simple turbine shaft bearings and a conventional blade-angle-adjustment mechanism.

Stator of electrical generator
This would probably be a series of iron laminations carrying electrical windings, taking the generated electricity to slip rings in the bearing of the main column

Streamlined Strut
supporting the electrical stator

Streamlined downstream side of stator

Streamlined rotating main column
Rather than the nacelle rotating around a fixed circular column that produces vortices in the air flow and associated buffeting of the turbine rotor blades, the whole upper column rotates around a bearing at the top of a shorter lower column. All components of the upper column can be streamlined, greatly reducing the buffeting and the noise.

Main bearing for main column
also encloses slip rings for power output. Only the lower, fixed, column is circular, and vortices from the airflow around it do not affect the rotor blades. This general arrangement should reduce manufacturing and erection costs considerably.