

Wind Turbine Project Status Report

Due two weeks from assigned date (will count as an exam grade)

Maximum of four pages (1.5 spacing)

What should be included?

1. A description of the prototype turbine
 - a. Magnets strength
 - b. Coils turns
 - c. Coil areas, inner, outer, average
 - d. Turbine construction
 - e. Shaft bearing
 - f. Wind capture area description
 - g. A photograph of turbine (no more than $\frac{1}{4}$ of page)
 - h. Dimensions
 - i. Other construction issues
2. Drill test results
 - a. 120 RPM voltage
 - b. 360 RPM voltage
 - c. 600 RPM voltage
 - d. Test issues (problems)
 - e. Turbine adjustments
 - f. Re-testing?
3. Wind test results
 - a. mph cut-in
 - b. 7 mph no-load /load voltage
 - c. 10 mph no-load / load voltage
 - d. 12 mph no-load / load voltage
 - e. RPM change for 7,10, 12 mph
 - f. Test issues
4. Competition Analysis
 - a. What you learned from the competition
 - b. Strengths / weaknesses
 - c. Would it be to your benefit to merge with them?
5. Improved turbine description
 - a. Description
 - b. Improved bearing
 - c. Improved wind capture
 - d. Improved construction
 - e. Coil / magnet changes
 - f. Projected 360 RPM and 600 RPM voltages