

Technology Demonstration Development for Embedded Diagnostics for Wind Turbine Health Management and Wind Farm Maintenance Management

1. Where the wind turbine is located: Utilizing PSU resources



2. How the data is collected:

This effort will utilize sensors and hardware that we currently own.

1. Model CLSM-2000 closed loop hall effect current sensor



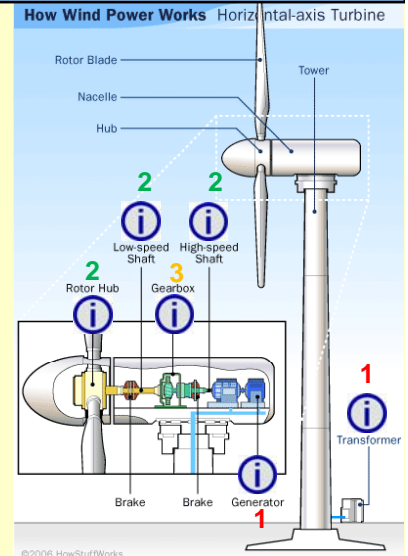
2. USD optical shaft encoder



3. Industrial grade accelerometer



3. What is feasibly monitored.

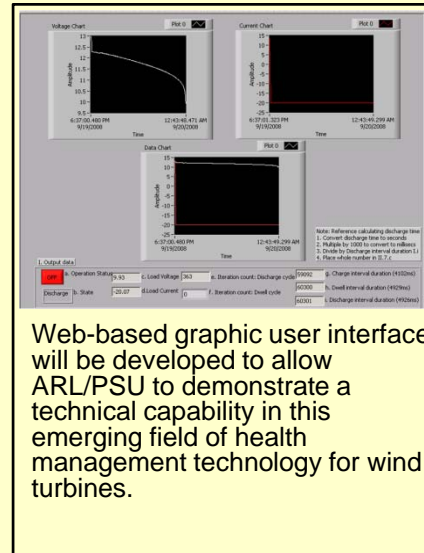
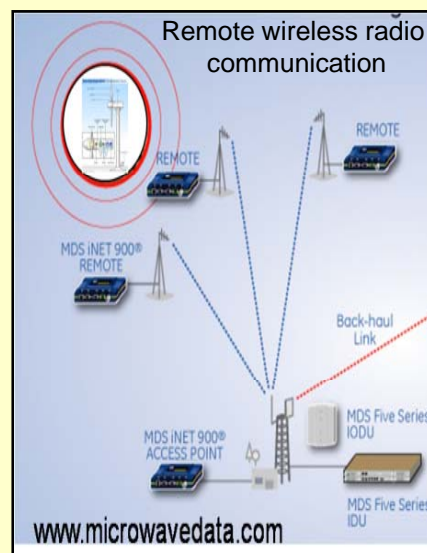
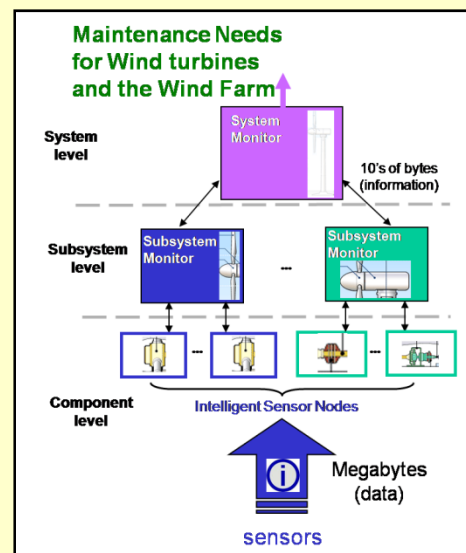


4. How the data is aggregated:

5. How data is transmitted:

6. Who accesses data:

7. When demonstration is on-line:



- Project Time Line:**
- Total estimated time: 6 months
- 1 month: Project Planning Coordination
 - 1 month: Develop and Test Hardware
 - 2 month: Installation of hardware Initial GUI design Communication testing
 - 2 month: Troubleshoot hardware Finalize GUI –bring online Establish com link Collect sample data Debug