



System components and how they work together:

1. Wind turns the **Aeroturbines**, which convert wind energy into rotational energy, via the attached **Alternators** converting rotational energy to 3-phase AC electricity.
2. The **Alternators** pass 3-phase AC electricity to the **Wind Interface Boxes** which convert 3-phase AC electricity into DC electricity and regulate the maximum voltage.
3. The **Wind Interface Boxes** deliver most of the DC electricity produced to the **DC to AC Inverters** and send any excess to the **DC Diversion Loads**, which use extra electricity to make heat.
4. The rooftop **Anemometer** sends wind speed information to the main **Wind Interface Box** connected, through the system, to the main **Wind and Power Readout**.
5. The **Wind and Power Readout** receives wind speed and wind direction data from the **Wind Interface Box** and power readings from the **DC to AC Inverter**. The **Wind and Power Readout** data can be read on site or sent to a collection server and then accessed via a specified URL through the **DC to AC Inverter**.
6. The **DC to AC Inverter** takes incoming DC power and converts that variable DC power into standard AC building and grid voltage.
7. The **DC to AC Inverter** sends standard 240 volt (or 208 volt) 60 cycle, AC voltage to the **Outdoor Utility Shutoff** **FIRST**, before going back into to the building's **Breaker Box**. After supplying building loads, the power **FINALLY** then goes to the **Utility Grid**. The **Outdoor Utility Shutoff** is there for the utility lineman as needed.