Warranty - Maintenance - Longevity.

Manufacturers of wind and solar products only warranty the product - they do not cover shipping, labour or installation. This means, a wind turbine owner when something goes wrong, will be required, at own expense, to take the turbine down from the tower and send it back to the distributor, dealer or manufacturer directly - plus reinstall it when it comes back. This can be expensive - especially if it is installed on a freestanding tower and a crane or a crew may be required to take it down and raise it again. It is a good idea to install a wind generator on a tilt-up tower that can be operated with a winch, tractor or truck.

In our business life, however, only 1 solar panel sold has been returned for warranty.

Maintenance

Wind generators should be checked once a year. The blades may require repair from abrasion - most will require touch up painting where they start to rust. For wind generators, we recommend only quality units with minimal maintenance requirements.

Generally, the only maintenance required with solar panels is wiping the snow off them and checking for loose fasteners.

Longevity

Solar panels have an expected life span of 35 to 50 years. Wind generators are much more prone to wear because of the moving parts and exposure to the wind. Their lifespan is generally 15 to 20 years, We have seen some to last only a year. The difference in cost to a better unit can be used up very quickly in repairs (even in warranty situations). Even better wind generators can have problems, but quality in general usually pays.

Conclusion

At solar system may seem to be priced higher, but consider that it will last at least twice as long as a wind gen, which would put its KWh price equal or lower over the same period of time. Also - the sun is more consistent then wind. Solar production rarely dips low for more than 2 or 3 days at a time. Wind can be down for a week or more. So, unless you have wind speeds that are consistent and at least about 12 mph average, solar is generally the better choice.

Consider cost's of the installation and replacement, which is higher for wind turbines than for solar PV panels, since a wind generator will be have to be replaced twice or more in one life span of a solar panel. In terms of the BOS components (inverters, charge controllers, etc.), wind systems also have a higher replacement rate than solar. It seems clear that wind is harder on the electronics than solar generation is.