

# Frequently Asked Questions (I)

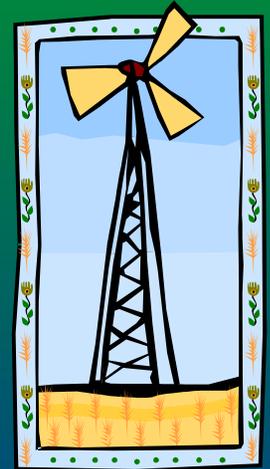
- Lightning: Effectively avoided with proper grounding and use of surge suppressors



- Ice Shedding: Blades with ice don't work! Ice typically accumulates at the base of the tower.
- Severe Storms: Can be a problem, some turbines have survived hurricanes and tornados
- Hail Damage: Have not heard of problems

# Frequently Asked Questions (II)

- Radio/TV Interference: Not a problem with today's fiberglass or wood blades (no metal blades!)
- Noise:
  - Below 30 mph, soft “swoosh” sound
  - Above 30 mph, can get either:
    - Loud buzzing from blade “flutter”
    - “Wop/wop” sound like a helicopter if furled
- Impact on Birds: Bird kills are rare, use common sense in siting turbines



# Frequently Asked Questions (III)

- Homeowners Insurance: Coverage for a damaged wind turbine varies, consult your insurer
- Property Taxes: Increased property value? Some states provide temporary or permanent exemptions
- FAA Regulations:
  - Proximity to local airport versus tower height
  - Investigate if within ~3 miles
- Zoning: Towers > 30–35 ft may require a “special use review” by the local zoning authority
  - Few problems in rural areas
  - May be difficult/impossible to get for urban/suburban areas

# Will Wind Energy Work For Me?

- Good wind resource?
- Minimum 2 to 3 acres of land? ( $\geq 10\text{kW}$  turbine)
- Local zoning rules/process or neighborhood covenants that allow wind turbines on at least 60 to 80-ft towers?
- Comfortable with long-term investments?
- Concerned about rising electricity prices in the future?
- Concerned about the environmental impacts of electric power generation?
- A desire to be more self-sufficient?



# Guidance on Structures Near Airports

from: FAA Advisory Circular AC 70/7460-2K

