



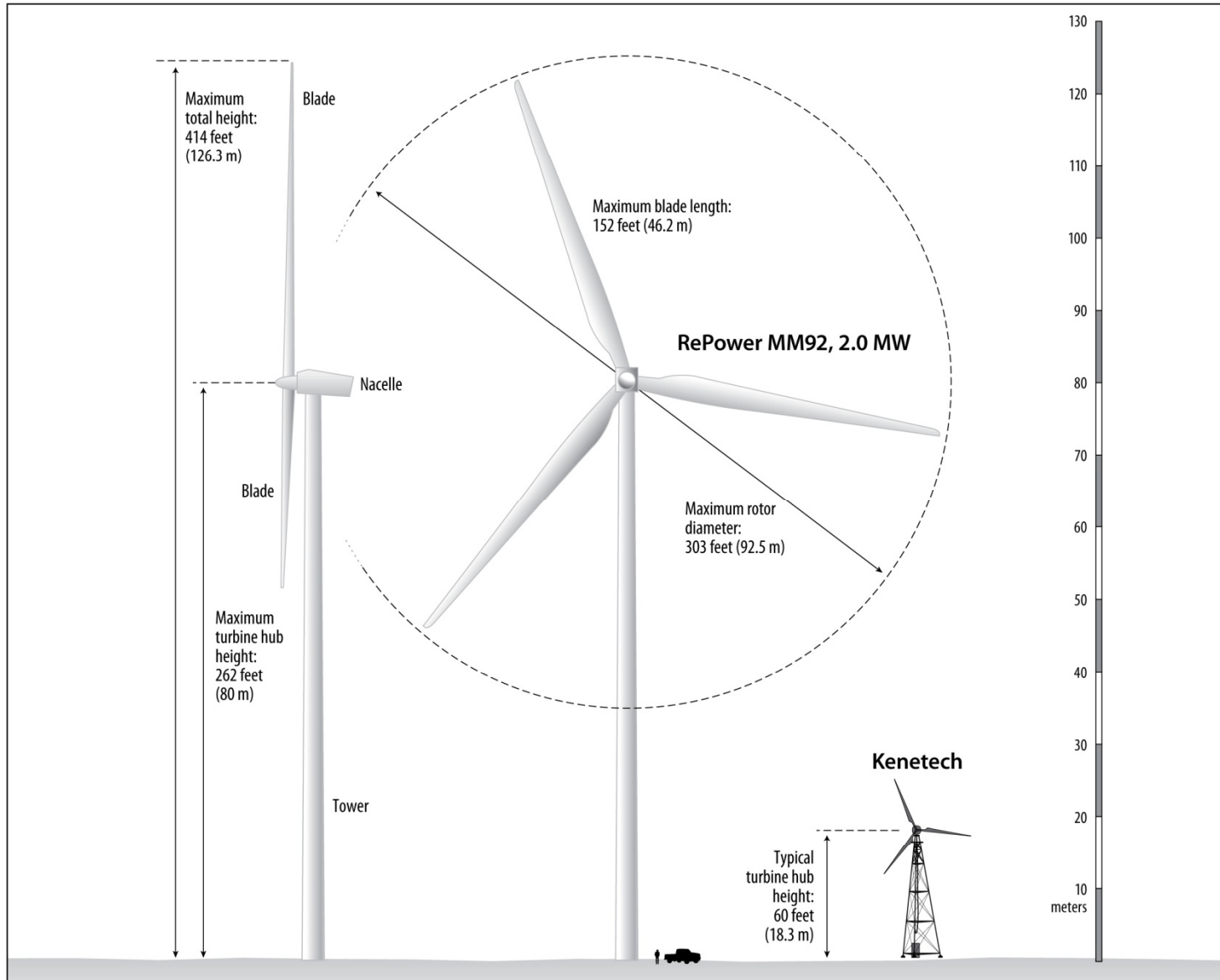
Rick Miller

Nuts and Bolts of Wind Energy: Notes from the Field

*December 7, 2011*



# Repowering Schematic



# Old versus New

**Palms Springs, CA**



**Columbia Gorge, OR/WA**



**Palms Springs, CA**



**Columbia Gorge, OR/WA**



# Vasco Road Existing Condition



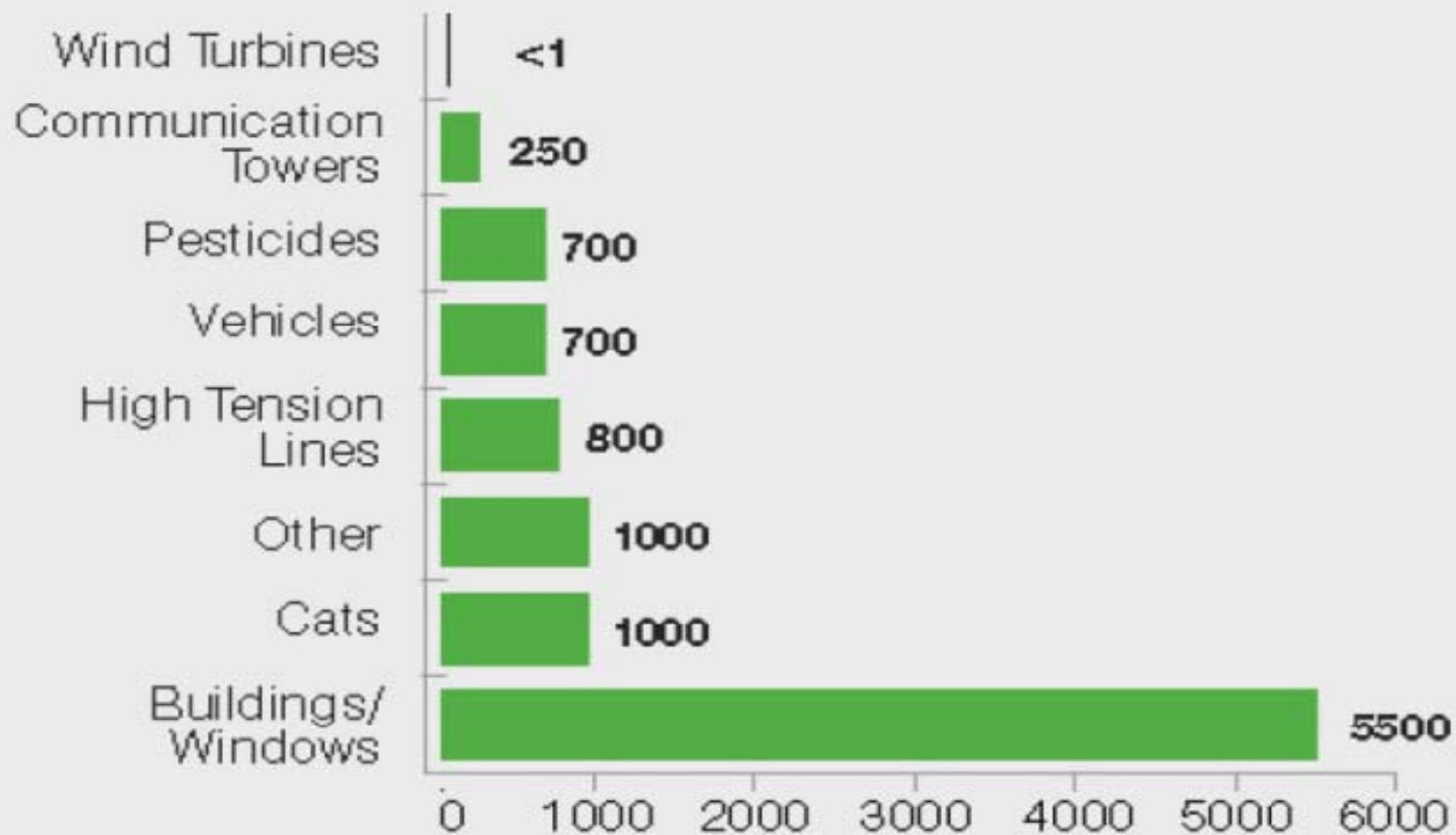
## Vasco Road Visual Simulation: GE 1.5 XLe



## Current Wind Development Practices:

- Pre and post construction avian/bat monitoring
- Seasonal constraints for nesting birds
  - No guy wires on met towers
  - Reduce siting on ridge tops
  - Reduce siting in migration corridors
- Compensation for loss of foraging habitat
  - Adaptive Management Practices

## Causes of Bird Fatalities, Number per 10,000 fatalities



*Data Sources: Erickson et al., 2002., Summary of Anthropogenic Causes of Bird Mortality.*