GE Energy 1.5 MW Wind Turbine

IIT Grand Ridge Discussion

Steve Moffitt

July, 2011





Global Research Headquarters

Niskayuna, NY



- Established in 1900
- Nearly 100 research labs
- 1,800 technologists, majority hold PhDs



Expanding our global presence





Global Research - Europe Munich, Germany





Brazil Technology Center coming soon



John F. Welch Technology Center Bangalore, India

China Technology Center Shanghai, China



imagination at work

© 2011, General Electric Company

GE Energy ... power generation

Thermal

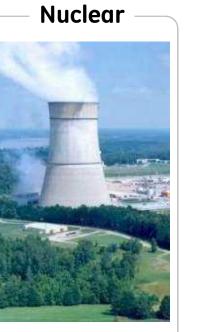


- Gas turbines
- Coal
 - Heavy duty (40-500MW)
 - Aeroderivatives (18-100MW)
 - Combined cycle systems
- IGCC
- Steam turbines
- Adv nuclear fuel

• ABWR

• ESBWR

CANDU fuel & services



Renewables



- Wind
 - Land based
 - Offshore
- Solar
 - Grid connected
 - Stand alone
- Biomass
 - Gas engines 0.3-4MW
 - Non natural gas

imagination at work

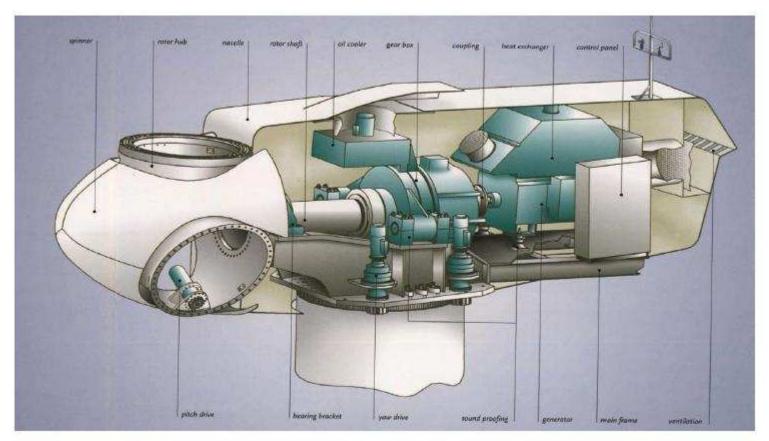


Fig. 2: GE Energy 1.5ste 60Hz Wind Turbine Nacelle Layout



Wind Farm Basic Layout

- Wind turbine generators
- Pad mounted transformers
- Power cables, control circuits, protection, and SCADA
- Substation transformer
- Point of interconnection

