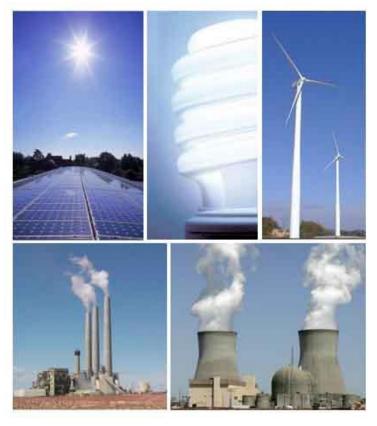


## Southern Wind Energy

Simon Mahan October 16, 2014

### **About Us**

For more than 25 years the Southern Alliance for Clean Energy has worked to promote responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities throughout the Southeast.



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### Wind Power Demand



"Wind power is a <u>clean and limitless</u> <u>source</u> of energy that directly enhances TVA's mission of environmental stewardship."

"Adding wind energy to our generation mix underscores our commitment to a diverse portfolio that offers <u>clean, safe, reliable,</u> <u>sustainable and low-cost electricity for years to come.</u>"



A SOUTHERN COMPANY



"These agreements are good for our customers for one very basic reason, and that is, *they* save our customers money."

#### A SOUTHERN COMPANY

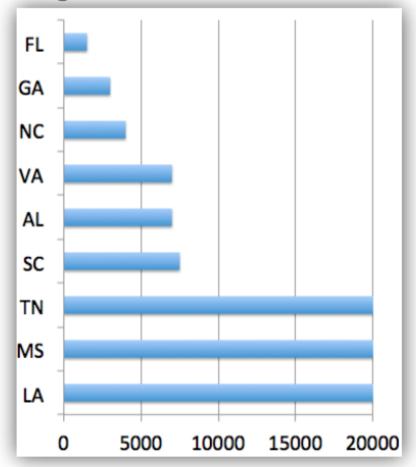
"...[W]e were in a good position to pursue additional renewable resources at <u>a good</u> <u>price for customers</u>.



# Advanced Turbine Technology: Expanded Potential

- Louisiana, Mississippi, and Tennessee all contain over 25,000 megawatts of potential
- With new turbines, the region contains over 134,000 megawatts (MW) of wind potential—about half as much of total installed electric utility capacity!
- With improved turbines and reduced costs, wind farms now make economic sense in all states across the South.
- Projects proposed in almost every state

#### **Megawatts of Onshore Wind Potential**



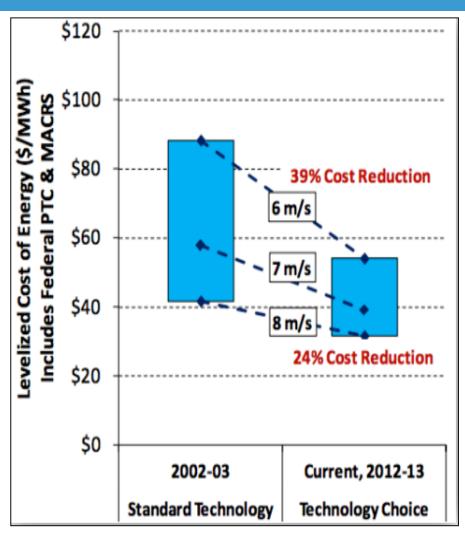
Source: Adapted from National Renewable Energy Lab 2013

Credit: National Renewable Energy Laboratory



# Advanced Turbine Technology: Reduced Costs

- Advanced technology accesses increased average wind speeds which lowers prices
- Land-based wind energy is now one of the lowest cost forms of new power generation in the country
- Costs have declined by 39% over the past decade
- Cost in the Southeast still higher than the Midwest, but continues to drop as technology improves
- Costs will continue to drop



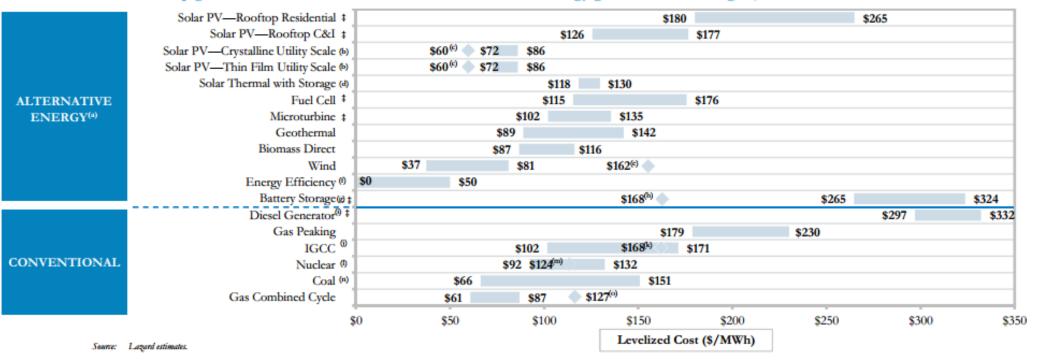
Credit: National Renewable Energy Laboratory, 2013



## Levelized Cost of Energy

#### Unsubsidized Levelized Cost of Energy Comparison

Certain Alternative Energy generation technologies are cost-competitive with conventional generation technologies under some scenarios; such observation does not take into account potential social and environmental externalities (e.g., social costs of distributed generation, environmental consequences of certain conventional generation technologies, etc.) or reliability-related considerations (e.g., transmission and back-up generation costs associated with certain Alternative Energy generation technologies)





## **Contact Us**

Thank you! Please send any further questions to:

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