

## US Wind Power Market Drives Toward New Growth Plateau

**Cambridge, MA, 21 June 2007** – With Texas, California, New York, Minnesota, Colorado and Washington at the forefront of wind project development, the US wind power market is expected to reach a cumulative installed wind capacity of nearly 49,000 MW by 2015, according to a new study by Emerging Energy Research (EER) - a leading advisory and consulting firm tracking emerging technologies in global energy markets.

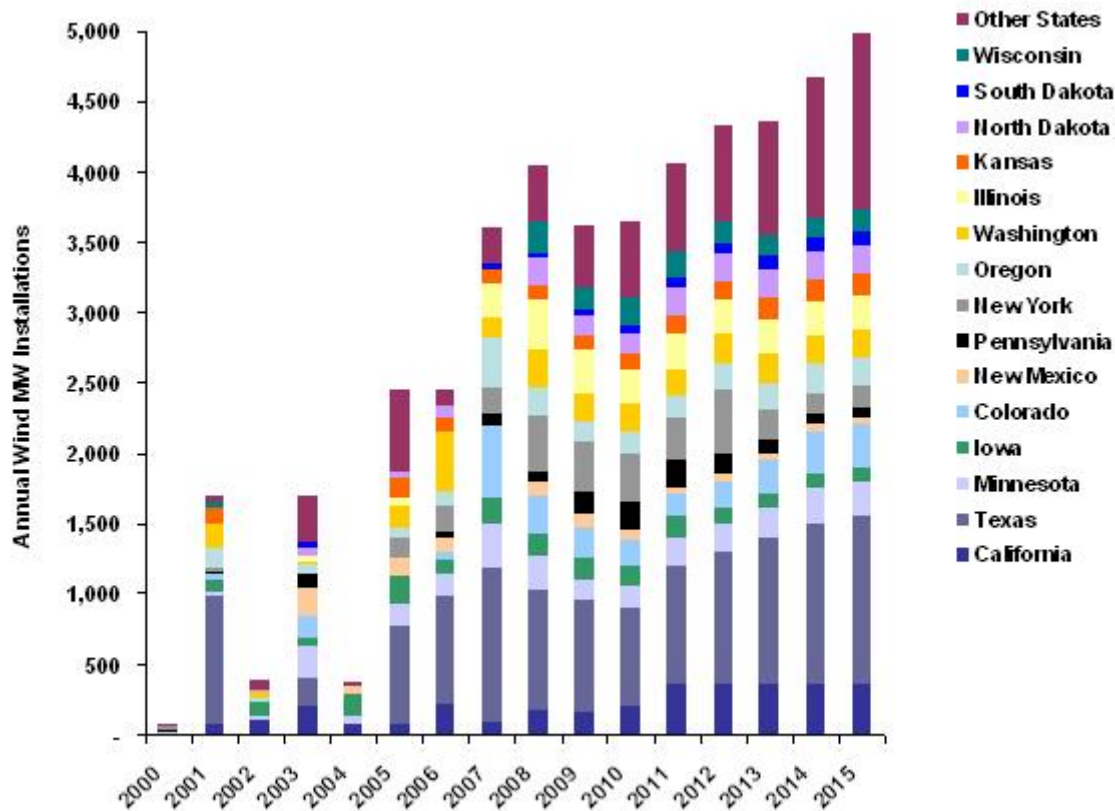
Wind project development activity has quickly responded to the growing demand for renewable energy in the US, with EER estimating a total US wind project pipeline in excess of 125 GW of projects at various stages of development. With more than US \$65 billion forecasted to be invested in additional wind capacity between 2007 and 2015, the US is projected to rank first in the world in cumulative installed wind capacity with approximately 19% of global wind market share by the end of 2015, according to EER's just-released study.

"With greater certainty in the energy policy fundamentals underpinning US wind growth potential, the US market has become a core demand hub for global wind players across the value chain, with both aggressive foreign wind development players as well as numerous global wind turbine vendors investing significant sums to secure a long-term US wind market position," says EER senior analyst Joshua Magee.

The US wind market is expected to reach record levels in both 2007 and 2008 with 7,650 MW of new wind projected over the two-year period. However, beginning in 2009, US annual wind additions are expected to dip as the direct result of transmission bottlenecks. New transmission build-out post-2011 will help drive the US market toward a new plateau of growth, with the market expected to reach as much as 5 GW per year by 2015, according to EER.

By the end of 2015, several key states will have provided the greatest contributions to the overall US wind portfolio, with Texas accounting for 23% of total MW growth, and California, Minnesota, New York, Colorado, and Washington combined forecasted to account for approximately 30% of total market growth, according to EER.

***Exhibit: EER Base Case Annual Wind Power Capacity Growth by State, 2000-2015 (MW)***



Source: Emerging Energy Research

### Competitive Shifts Mark US Wind Power Ownership

Rapid consolidation over the past two years has quickly changed the composition of the US market solidifying around a group of 10 to 15 big-name IPP players, according to EER's study. "Fueled by the tremendous annual market potential since 2005, industry consolidation in the US wind market has reached an all-time high, with domestic US power generation companies vying with aggressive foreign entrants for US wind company acquisition opportunities," says Magee.

"As annual US wind development becomes increasingly dominated by companies with the right combination of greenfield experience, financial muscle, and turbine supply, the race is on between major US power players and European IPPs and utilities for US market positioning," says Magee.

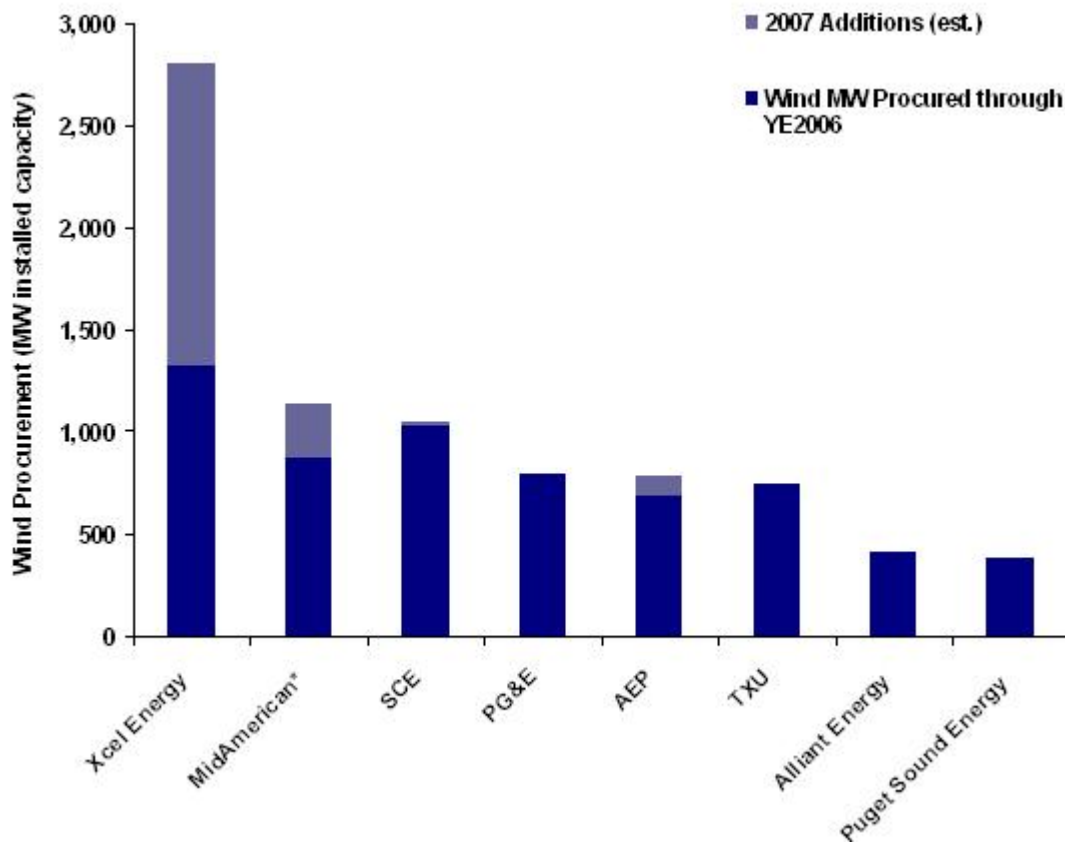
The next five years will continue to witness shifts in the competitive market environment as a second round of consolidation is expected as IPPs begin to acquire one another for scale, according to EER. US market players can expect increasing erosion of market share as new European entrants such as Iberdrola and EDP challenge long-standing US wind IPPs such as FPL.

At the same time, spurred by recent volatility in fossil fuel prices as well as by state RPS mandates, US utility wind procurement has reached an all-time high, with several companies seeking to extract greater value by exploring wind project ownership and

development.

"Within the last two years, wind has moved out of the realm of a fringe source of power generation and into the mainstream US energy market, where it is now largely seen as an important way to diversify utility energy portfolios throughout many regions of the country," says Magee. "In addition to state RPS demand, many utilities such as Xcel Energy and MidAmerican are finding that wind provides a cost-saving hedge against natural gas fuel price volatility, offering a further incentive for the large-scale deployment of new wind plant."

**Exhibit: Top US Utilities by Total Wind Power Procurement, YE 2007 (est.)**



Note: \*Figures for MidAmerican Energy include company subsidiary PacifiCorp  
Source: Utilities, Emerging Energy Research

### Soaring Demand Spurs US Investment in Manufacturing, Transmission

As the US wind market has exploded since 2005, vendor competition in the US wind industry has also intensified, with numerous foreign wind turbine manufacturers making significant investments to build order books with key US customers and to establish a greater manufacturing presence.

Turbine manufacturing investment in the US has grown markedly in the past two years, with aggressive new entrants now vying with US market veterans GE and Vestas for big-name contracts. "Numerous turbine vendors have established manufacturing or turbine

assembly facilities in the US since 2005, increasing supply availability to US developers but also putting pressure on each vendor to secure its US component supply chain as vendor execution on existing contracts becomes crucial," according to Magee.

Investments in new transmission capacity will also play a central role in determining the timing and geographic focus of new wind opportunities, especially as existing grid infrastructure begins to become saturated in several key wind regions and states, according to EER.

"A combination of federal and state renewable energy policy incentives such as the PTC, national and state RPS', and carbon emissions regulations will be crucial to spur the transmission expansion into high-wind resource areas that will be necessary to continue driving US wind growth upward," says Magee.

#### **ABOUT THE STUDY**

*US Wind Power Markets and Strategies 2007-2015* provides over 255 pages of market intelligence and competitive analysis of US wind power markets. Study features include: state by state analysis, market environment rankings, competitive analysis of utilities, IPPs and developers, as well as US wind turbine manufacturer and component supplier analysis. For more information on EER's US wind power market study, released in June 2007, [follow this link](#).

#### **ABOUT EMERGING ENERGY RESEARCH**

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