

ENERGY MATTERS

U.S. Plays Leading Role In Wind Energy

(NAPSA)—Whichever way the wind blows, wind will play a leading role in supplying the nation's future energy needs.

Wind energy is already one of the fastest-growing energy sources, and new wind farms are the second-largest source of new power generation in the U.S., after natural gas power plants.

America's wind farm fleet, with over 9,000 megawatts of capacity currently installed, is generating enough electricity to serve over 2.3 million homes—more than the number of homes found in a city such as Los Angeles. Using wind power could save precious natural gas and help to reduce prices and imports of the fuel.

The enormous potential of wind energy may surprise some people: Good areas (about 6 percent of the land area) have the potential to supply more than one and a half times the current electricity consumption of the U.S.

A number of federal policies support the wind industry and have contributed to the recent expansion of the wind power market in the U.S.

For example, the continued availability of a federal production tax credit has sustained industry growth.

New wind farm technology is accelerating the rate of energy generation. Last year, the wind power capacity of the U.S. increased by 27 percent. Overall, wind energy is the fastest-growing energy generation technology—expanding by 30 to 40 percent per year.

The output range of wind



New technology is making wind power an even more effective source of energy, making energy less costly.

power stations has continuously improved.

One of the new suppliers for wind farms in the U.S., Voith, has improved energy generation through wind power with a new hydrodynamic drive system called WinDrive.

This system's variable input (rotor) speeds can now be converted into constant output (generator) speeds. Depending on the prevailing wind speed, the wind rotor is always operated at optimum speed.

By the dynamic decoupling of input and output side, load peaks caused by gusty winds are evened out.

Mastering such load peaks with frequency inverter solutions has proved to be difficult in the past. Even if the rotor is turning, no energy will be generated.

The drive concept has already been successfully tested for plants of up to 5 megawatts.

For more information, visit www.voithturbo.com.