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The National Association of Counties' Energy, Environment and Land Use Committee voted to make renewable energy its No. 1 legislative priority in 2007.

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Reaching 20% of the U.S. electricity portfolio is an achievable goal for wind power, said both an industry consultant and a turbine manufacturer representative at the AWEA Wind Energy Fall Symposium.

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The time is now to take the wind power industry to the next level—that was the recurring theme at the opening session of the AWEA Wind Energy Fall Symposium.

FPL Energy goes on K-12 circuit

FPL Energy, LLC, announced a partnership with the KidWind Project to bring the science of wind energy into classrooms throughout Texas.

Pennsylvania takes EPA award as top state green purchaser

Pennsylvania has received a 2006 Green Power Leadership Award from the U.S. Environmental Protection Agency and the U.S. Department of Energy for being the largest state purchaser of green electricity in the nation.

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**MAJOR TAX BILL PASSED BY HOUSE INCLUDES
PTC EXTENSION**

In a late-year flurry of activity on Capitol Hill that could have a major impact on the wind industry, the U.S. House of Representatives passed a one-year extension of the wind energy production tax credit (PTC). As of press time, the Senate was expected to vote on the bill either late Friday or Saturday. President Bush is expected to sign the bill.

The extension is part of a \$45.1 billion package covering both trade and tax policy; it includes extensions of many popular tax credits such as the research and development credit for businesses. The legislation would extend the PTC, which otherwise would expire at the end of 2007, through December 31, 2008, giving the wind power industry two full years of additional tax stability.

H.R. 6111, which passed by a 367-45 margin, maintains all aspects of current PTC law. That includes a credit price of 1.9 cents per kWh, an annual adjustment for inflation, and a 10-year term for wind turbines to generate credits.

“Extending the credit now—a full year before it was set to expire on Dec 31, 2007—is enormously important,” said AWEA Legislative Director Jaime Steve. Timely action by Congress will boost significant upward growth and investment for wind and other renewable energy technologies, spurring thousands of new jobs and millions of dollars in rural economic development, while also bringing cleaner air to all Americans, AWEA said. “Extending the credit is also an investment fighting climate change and increasing American energy security,” Steve said.

**CLIPPER TURBINES TO BE DELIVERED
IN 2008 TO EDISON MISSION**

Clipper Windpower Plc announced December 7 it will supply 32 units (80 MW) of its 2.5-MW Liberty wind turbines to Edison Mission Energy, a subsidiary of Edison Mission Group (EMG) for delivery in 2008.

The transaction facilitates EMG’s execution of an option to purchase wind turbines as set forth in an integrated supply agreement between the parties and previously announced by Clipper in July 2006. The July transaction, a 280-MW sale and development agreement between Clipper and EMG, represents firm and contingent orders for up to 112 Liberty turbines for installation through 2008. Firm supply orders of 50 MW are slated for delivery in 2007, including installation services and a five-year service agreement. In addition to the options for the 80 MW of turbines exercised December 7, EMG also has options to acquire up to 150 additional megawatts of Clipper-held U.S. project development resources which will deploy Clipper 2.5-MW Liberty wind turbines.

Clipper's 2006 transaction announcements represent firm commitments of 875 MW of Liberty wind turbines, and 5,065 MW of contingent orders for delivery through 2011.

**NAT'L ASSOCIATION OF COUNTIES RELEASES WIND GUIDE,
MAKES RENEWABLES LEGISLATIVE PRIORITY**

The National Association of Counties' (NACo) Energy, Environment and Land Use Committee voted to make renewable energy its No. 1 legislative priority in 2007.

The vote gives NACo's staff the go-ahead to put legislative resources toward renewable energy issues. "When issues come up, it allows our staff to be able to support them," said Cascade County, Mont., Commission Chair Peggy Beltrone, who is part of the committee leadership.

In addition to the outcome, also noteworthy is the wide margin of the vote, with renewables topping the second highest priority by nearly a two-to-one margin. That makes renewables, Beltrone said, "the runaway No. 1 priority" in the committee's eyes. In previous years, renewables "hadn't even been in the pack," Beltrone told *Wind Energy Weekly*. "We were really pleased that there was such a sea change." The reason for the change, she believes, is simply that information on renewables—and what they can do for rural economies and national security—has penetrated public awareness to a much greater extent in the last several months.

In related news, NACo and the National Renewable Energy Laboratory have just released a wind energy guide for county commissioners. (go to www.naco.org/techassistance and click on "Energy Management"). Beltrone said the guide is designed so that county commissioners interested in wind power's potential benefits to their jurisdictions can learn more about the clean energy source, "or if they have a developer knocking on their door, they can understand some of the issues."

**REPORT: OFFSHORE PROJECTS COULD GET DANES
TO 50% WIND POWER**

An eight-year study on the impacts of the world's two largest offshore wind farms, Horns Rev and Nysted, concluded that wind power may be able to provide more than 50% of Danish electricity consumption by 2025, with most of the new capacity coming from offshore projects.

Currently, wind resources provide about 20% of Denmark's electricity. "Offshore wind power can contribute significantly to achieving the [European Union] goals of a 21% share of renewable electricity by 2010, halting global warming and reducing our dependence on coal, oil and gas," said the report, which was produced by the Danish Energy Authority, Danish Forest and Nature Agency, and project owner utilities Dong Energy and Vattenfall. "At sea, wind resources are better and suitable sites are more readily available to enable these large projects to operate in

harmony with the surrounding environment.”

Given the stated potential for offshore wind, the report said, “We are therefore very pleased that the Danish environmental monitoring program on large-scale offshore wind power has received a positive evaluation by the International Advisory Panel of Experts on Marine Ecology.”

According to the report, fish populations were similar to what they were prior to the development of the two offshore projects; a Thermal Animal Detection System, meanwhile, provided evidence that “water bird collisions were rare events.”

Still, authors of the report emphasized the importance of careful siting based on environmental study. “Offshore Wind farms impact their natural surroundings and it is essential to ensure that conditions in unique marine areas are not detrimentally affected,” the report said. “Spatial planning when identifying potential locations for offshore wind farms . . . must ensure that future offshore wind farms are established in suitable areas in such a way that substantial adverse environmental impacts can be avoided or diminished. One of the challenges we face is to assess the cumulative effects from multiple offshore wind farms to arrive at optimal site selection.”

**TURBINE VENDORS:
EXCHANGE RATE BIG FACTOR IN PRICES**

Wind turbine price increases are the result of unfavorable exchange rates and escalation in materials costs—more so than they are attributable to the tight market for the turbines themselves, said several suppliers on the panel of the Large Wind Turbine Vendor Forum December 7 at the AWEA Wind Energy Fall Symposium in Phoenix, Ariz.

Lawrence Willey, manager of compliance and certification for GE Infrastructure’s Wind Systems Engineering, noted that much work has been done in the last year to understand turbine price increases. Out of the roughly \$400 increase in per-kilowatt-hour installed cost between 2002 and 2006 (\$1,600 per kWh in 2006 compared to \$1,200 in 2006), as much as \$225 was due to the exchange rate with the euro, while another \$60 was attributable to cost increases in materials, he said.

Panelists said that the exchange rate will continue to encourage manufacturers to set up shop in the U.S. “I think we’re already seeing evidence of that,” said Willey. However, Chris Lambert, marketing manager for the wind turbine product line of Mitsubishi Power Systems, predicted that most of the U.S. manufacturing will continue to be limited mostly to blade and tower production, with other components coming from offshore.

Other than materials increases and bad exchange rates, turbine price spikes are caused by a combination of factors, panelists said. “I think it’s been the unprecedented demand,” said Lambert. “I think it’s continued to drive price.” Manufacturers of turbine components also play a big role in the price dynamic, with various sectors of the supply chain showing some hesitance to make the necessary investments to increase production and ease supply constraints, thus underscoring the need for long-term federal policy. “Some of the vendors have been nervous

about the wind industry because they've seen the ups and downs," said EU Energy North America Executive Vice President Andy Lockhart.

Panelists largely downplayed any notion that favorable government policies in other countries (such as subsidies) might steer their turbine supplies toward those countries and away from the U.S. "The evaluation of where to send turbines is a global decision, and the U.S. is definitely competing," said Lambert. Expanding on that viewpoint, Hans Buus, Suzlon Energy Chief Officer for Service and Sales Support, said that every market has fluctuations, and so companies manage risk by maintaining roots in various countries as opposed to simply jumping from market to market and turning their back on established customers. "You want to do what you can to be there, and of course you don't want to turn your customers down," he said.

WIND POWER COST PROJECTED TO FALL IN LONG TERM

Reaching 20% of the U.S. electricity portfolio is an achievable goal for wind power, said both an industry consultant and a turbine manufacturer representative at the AWEA Wind Energy Fall Symposium.

Still, both Black & Veatch Renewable Energy Consultant Ric O'Connell and Jim Lyons, chief engineer at GE Global Research Center, cautioned that it will take a great effort on all fronts. To get to 20%, the industry will have to be installing 20,000 MW of wind power capacity a year by 2025 and beyond, said O'Connell. "We're talking a half a trillion dollars in investment," he said.

Lyons said that the manufacturing part of the 20% equation is "a manageable challenge." Turbines with capacities of 5 MW, he said, can be deployed in such areas as the Great Plains, allowing for "gigawatt-scale land projects." Lyons acknowledged that offshore technology is still relatively immature but said it holds much promise. "We think 8 cents per kWh is achievable," he said of offshore projects.

Black & Veatch, which is studying the feasibility of reaching the 20% mark, expects efficiency and scale improvements to drive down the cost of wind power. According to the firm's projections, "Prices in 2015 are roughly equivalent to prices today with the production tax credit," O'Connell said.

INDUSTRY GEARS UP FOR BIG 2007

The time is now to take the wind power industry to the next level.

That was the recurring theme at the opening session of the AWEA Wind Energy Fall Symposium and on through the event in Phoenix, Ariz., this week. The end-of-year timing of the

conference provided an opportunity for the industry to look ahead to both the coming year and well beyond. As part of the event's opening session, Ed Zaelke, a partner at Morgan, Lewis & Bockius, LLP, and AWEA's board president, and AWEA Executive Director Randy Swisher outlined what AWEA and the industry will focus on in 2007.

"A trade association has a single job: to increase the size of the industry," said Zaelke. Zeroing in on the conference's theme of reaching 20% of the U.S. electricity portfolio, Swisher echoed Zaelke's sentiment, asking, "What are the steps we need to take today and tomorrow to ensure your businesses will continue to see 25% and 30% growth for years to come?"

With a new Congress coming to the Capitol in January, the legislative agenda is one of the initiatives at the forefront for 2007. While renewable energy is a nonpartisan issue that enjoys the support from both sides of the aisle, the new Congressional leadership means new opportunity, said Swisher and Zaelke.

"We have to look at a federal [renewable portfolio standard]," said Zaelke. "We have to look at climate change [legislation]." Meanwhile, at the Symposium AWEA Legislative Director Jaime Steve announced that a production tax credit extension cleared the House on Thursday [see related story].

"With the new Congress and the new leadership, we have new opportunities," said Swisher, emphasizing that "Republicans and Democrats love our industry."

Also receiving resources and attention in 2007 will be a new Visibility Campaign for wind power. In that regard, Zaelke announced that AWEA has hired public relations firm Edelman, creators of General Electric's "Ecomagination" campaign, to work with the association in spearheading that effort.

Zaelke also discussed a dues restructuring program to help provide AWEA and the industry with the resources needed to achieve its goals. The restructuring, along with other nondues revenues, will allow AWEA to increase its budget by 44%.

Both Zaelke and Swisher urged strong participation on the part of members to move the industry forward. "We need our individual members at the table in our regional markets," said Swisher, speaking about the aggressive agendas of AWEA's strategic committees, particularly the Transmission Committee. The opening session also featured Nora Brownell, former commissioner of the Federal Energy Regulatory Commission, who called on the wind industry to make sure that it takes its place at the planning table on transmission and other issues. Speaking about the need for national siting policy for transmission, the enthusiastic Brownell said, "I think FERC is really behind that, and FERC will need the support."

The Fall Symposium drew over 550 participants, a 45% increase from the first Symposium, held last year. "This event is intended to promote meaningful discussions—and thanks to the thoughtful efforts of the session chairs and others involved in the planning and execution, that's exactly what it did," said WindLogics CEO Mark Ahlstrom, who served as the Symposium's Chairperson. "I could not be more pleased with the results."

**FPL ENERGY GIVING TEACHERS WIND EDUCATION;
K-12 TEACHER PROGRAM COMING TO WINDPOWER 2007**

FPL Energy, LLC, announced a partnership with the KidWind Project to bring the science of wind energy into classrooms throughout Texas.

The goal of the project is to introduce teachers to the benefits and wonders of wind power through hands-on science activities so that they will be able to take what they learn from the workshops into their classrooms to expose hundreds, if not thousands, of students to wind energy, the company said. The initial workshops will be held for teachers in the Abilene, Jim Ned, and Wylie School Districts in early December. According to the company, more than 70 teachers have already registered to participate in one of the workshops. After the initial workshops in December, FPL Energy anticipates taking the KidWind Project to other school districts throughout Texas, where it currently owns and operates wind farms.

The educational initiative also has an AWEA link: AWEA and KidWind are working in cooperation with the National Energy Education Development Project to develop a wind energy curriculum for K-12 teachers. "A KidWind program will be offered for teachers at WINDPOWER 2007 in Los Angeles in June," said AWEA Conference and Education Director Stephen Miner.

"FPL Energy is a strong believer in supporting educational opportunities for our children. Through KidWind we hope to enhance the knowledge and understanding of teachers and students alike of this very important clean energy source," said Eric Silagy, vice president, Texas Region, FPL Energy.

Through the KidWind Project, FPL Energy will be sponsoring a series of one-day workshops that will introduce teachers to a variety of topics in wind energy and technology. The workshops are split between lecture and hands-on lessons related to wind energy and technology. Teachers will also be provided with classroom materials and a comprehensive curriculum package so that they can bring the lessons learned in the workshop back to their students.

Michael Arquin, founder and managing director of KidWind, said, "We are excited to work with FPL Energy and to add Texas to our nationwide program. We are looking forward to introducing teachers in Texas to the elegance of wind power through hands-on science activities and help Texas schools become important resources for students, and the general public, to learn about and see wind energy in action."

**AFTER DOUBLING GREEN POWER PURCHASE,
PENNSYLVANIA TAKES AWARD**

Pennsylvania has received a 2006 Green Power Leadership Award from the U.S. Environmental Protection Agency and the U.S. Department of Energy for being the largest state

purchaser of green electricity in the nation. In August, Governor Edward Rendell (D) doubled Pennsylvania's green electricity purchase to 20% from 10%, harnessing in-state sustainable energy resources and in the process creating jobs, enhancing homeland security and providing significant environmental improvements in Pennsylvania. Through modifying its existing contract with Community Energy, Inc., the state is purchasing renewable energy credits equal to 200,000 MWh a year.

(Announcement)
HOUSING FOR WINDPOWER 2007
NOW OPEN

AWEA has negotiated discounted hotel rates at eight downtown Los Angeles hotels for WINDPOWER 2007 Conference & Exhibition taking place June 3 – 6, 2007. **Reservations are now being accepted!** Visit www.awea.org/wp07.html and click on the link for Hotel & Travel Information.

Why stay at a conference hotel? You'll be in the center of conference activity, that's why! You'll be able to network easily with other conference attendees. You'll have a better conference experience overall.

A limited number of rooms have been held at the various hotels at the AWEA discounted rates. We encourage you to book early to secure your reservation at your preferred hotel. With expectations that WINDPOWER 2007 will be the largest AWEA conference to date, rooms will go very fast!

To reserve a room, visit www.awea.org/wp07.html and click on Hotel & Travel Information. From the Reserve Your Hotel Room webpage, there is a link to online reservations. Or call the Housing Connection at (888) 221-9425 (toll-free US) or +1 (801) 521-9025 (international). You can also download a housing form from the website and fax or mail it to the Housing Connection.

DO NOT contact the hotels directly as they will not be able to reserve a room at the AWEA discounted rates. All reservations for WINDPOWER 2007 need to be made through the official housing provider, the Housing Connection.

Exhibitors: you can reserve a block of rooms by completing the Exhibitor Block Request Form on our website.

(Announcement)
WINDPOWER 2007
EXHIBITOR MEETING

WINDPOWER 2007 Exhibitors - mark your calendars for the Exhibitor Meeting being held Thursday, January 25, 2007 in Los Angeles, California. This is your chance for a sneak peek of the convention center, the exhibit hall, and exciting downtown Los Angeles. By attending, you will benefit from being one of the first exhibitors to personally meet the people who will assist you in having a successful exhibiting experience. Meet your contacts for the convention center, the convention and visitor's bureau, the show decorator, and your AWEA Conference and Exhibition staff. Be one of the first Exhibitors to receive the official Exhibitor Manual and have a jump on planning your show.

More details will be emailed to all primary exhibitor contacts in the coming weeks so stay tuned!

And if you haven't yet reserved your booth, the exhibit hall is over 95% sold out. Visit www.awea.org/wp07.html and click on the Become an Exhibitor or Sponsor link for more information on reserving your booth today!

UPCOMING AWEA EVENTS

AWEA Wind Power Asset Management Workshop

January 23-24, 2007
San Diego, Calif.

AWEA Wind Power Project Siting Workshop

February 28-March 2, 2007
Milwaukee, Wis.

AWEA Wind Power Finance & Investment Workshop

March 27-28, 2007
San Francisco, Calif.

WINDPOWER 2007 Conference & Exhibition

June 3-6, 2007
Los Angeles, Calif.

For more information visit www.awea.org/events.