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“We can achieve energy independence in 10 years, create a whole new industry with hundreds of thousands of high-paying jobs, and you’ll never have to send children and grandchildren to war in the Middle East again.” — Governor Brian Schweitzer

Montana Among 53 Wind Projects Funded by DOE



U.S. Department of Energy (DOE) Secretary Steven Chu recently announced selection of 53 new wind energy projects for up to \$8.5 million in total DOE funding. These projects will help begin to address market and deployment challenges identified in DOE’s 2008 report *20% Wind Energy by 2030*.

Increasing wind energy generation will be a critical factor in achieving the Obama Administration’s goals for clean energy, while also supporting new green jobs. Secretary Chu made the announcement by video at the WindPower 2009 Conference in Chicago earlier this month.

Projects were chosen in four topic areas: market acceptance, environmental impact, workforce development, and distributed wind technology. Selections of two additional

topic areas (supporting wind turbine research and testing; and transmission analysis, planning and assessments) will be announced at a later date.

In the market acceptance category, the State Of Montana, Office of the Governor was awarded \$100,000 for the project *Montana’s Response To 20% Wind by 2030: Overcoming the Challenges*.

“Wind energy is one of our most promising renewable energy sources,” said Secretary Chu. That’s why I’m pleased to make this announcement today. By continuing to make investments in renewable energy we can cut our dependence on foreign oil and invest in a clean energy agenda that creates jobs and puts money back into the pockets of consumers.”

The *20% Wind Energy by 2030* report found that the Nation possesses affordable wind energy resources in excess of those needed to generate

20% of U.S. electricity needs. The report also identified major challenges including: investment in a national transmission system; larger electric load balance areas and better regional planning; reduction in wind turbine capital costs; improvement of turbine performance; siting and environmental issues; and workforce development.

The full report is available from the Wind and Hydropower Technologies Program at www1.eere.energy.gov/windandhydro/.



Judith Gap Wind Energy Center in Montana. Photo: Invenergy LLC.

NorthWestern Energy Develops Qualification Requirements for USB Contractors



Photo: NREL/PIX

NorthWestern Energy has established qualification requirements for contractors interested in receiving Universal Systems Benefit (USB) funds for renewable energy (RE) projects within NorthWestern Energy's electric service territory.

These qualification requirements are effective June 1, 2009.

All contractors interested in receiving 2009 USB RE funds must meet these qualifications.

Applicants applying for USB funds in the first half of 2009 should submit a completed qualification application before June 1, 2009, to Danie Williams at NorthWestern Energy.

Applications received after June 1, 2009, will not be considered for the first half of the 2009 USB funding cycle.

The full qualifications requirements, as well as an application form, are available online at http://www.montanagreenpower.com/solar/PDF/contractor_qualification_requirements.pdf

“If the (community-project standards) are not producing power, then we need to ask the question why. This is about getting green energy to Montanans at a reasonable price.”— Representative Art Noonan

House Bill 343 Signed Into Law

Governor Schweitzer has signed into law House Bill 343, which essentially allows public utilities such as NorthWestern Energy to own a community renewable energy project.

The law requires NorthWestern Energy to purchase a minimum amount of green power generated from community renewable energy projects by 2012.

House Bill 343 will allow

the utility to meet those requirements with its own community renewable energy project, which can then be counted toward requirements in the Renewable Resource Standard.

HB343 was sponsored by Art Noonan, D-Butte.

Noonan acknowledges that some supporters of green power believe the bill will undermine the intent of the original (2005) bill, which was

to encourage development of small, independent renewable-power projects around the state.

“If the (community-project standards) are not producing power, then we need to ask the question why,” Noonan said. “This is about getting green energy to Montanans at a reasonable price.”

For more information on the bill, visit <http://data.opi.mt.gov/bills/2009/>

Mark Your Calendars

Here's a sample of the many upcoming events focusing on energy issues. For a more complete list, see our [Events Calendar](#).

[Photovoltaics Summit 2009](#)

June 1-3, 2009
San Francisco, CA

Building on the success of previous years, this event will once again bring together leading experts who will address the latest issues, discuss current progress and offer viable ways to move forward in the photovoltaics industry.

[Renewable Energy for Educators](#)

June 22-25, 2009
Carbondale, CO

Educators attending this seminar will learn about the impacts that our energy use has on the planet and how to best teach youth about solutions: energy conservation, energy efficiency, and renewable energy technologies.

DOE Requests \$2.3 Billion for Efficiency, Renewable Energy in FY 2010

President Barack Obama recently unveiled a \$26.4 billion budget request for DOE for fiscal FY 2010, including \$2.3 billion for the DOE Office of Energy Efficiency and Renewable Energy (EERE).

The budget aims to substantially expand the use of renewable energy sources while improving energy transmission infrastructure. It also makes significant investments in hybrids and plug-in hybrids, in smart grid technologies, and in scientific research and innovation.

The budget request for EERE represents a 6.4% increase above the appropriations for FY 2009, not counting funds provided through the American Recovery and Reinvestment Act.

The president's budget

includes significant increases for a number of EERE programs, including an 82.9% increase for solar energy, a 36.4% increase for wind energy, a 22% increase for vehicle technologies, a 69.8% increase for building technologies, and a 46.7% increase for the Federal Energy Management Program.

The budget also requests a near doubling in funding for program direction and a more than five-fold increase in funding for program support.

The proposed DOE budget also includes \$280 million to fund eight multi-disciplinary Energy Innovation Hubs, each of which is focused on a particular energy challenge. The hubs are meant to advance highly promising areas of energy science and technology from their early stages of research to the point that the risk level will be low enough for industry to

commercialize the technologies.

Two of the eight hubs are included in the EERE budget and will focus on integrating smart materials, designs, and systems into buildings to better conserve energy and on designing and discovering new concepts and materials needed to convert solar energy into electricity.

Another two hubs, included in the DOE Office of Science budget, will tackle the challenges of devising advanced methods of energy storage and creating fuels directly from sunlight without the use of plants or microbes.

Yet another hub will develop "smart" materials that will allow the electrical grid to adapt and respond to changing conditions, while the remaining three hubs will address challenges related to nuclear energy and carbon capture and storage.

This newsletter is a monthly feature of the Montana Green Power website. The website is funded with Universal System Benefits charges paid by all NorthWestern Energy customers.



Visit the website at www.MontanaGreenPower.com for more information on solar, wind, bioenergy, energy efficiency, and other topics.

Have a renewable energy tip or some news you want to share? Send it info@montanagreenpower.com.

Funding Opportunities: Quick Start Energy Grant Program

The newly established Quick Start Energy Grant Program provides grant funds for School districts in Montana to implement



cost-effective energy-efficiency measures.

The Montana Department of Commerce will distribute up to \$14,950,000 in Quick Start funds on a competitive reimbursement basis from May 15, 2009 until September 30, 2009.

Under Quick Start, public school districts may submit

applications for grant funding in the following two areas:

1) Energy Audit or Evaluation. An energy audit or evaluation of the potential for energy savings in a school facility by a pre-qualified energy auditor.

2) Energy Efficiency Improvements. Energy efficiency improvements that

are based on an energy audit or evaluation and that are expected to achieve measurable energy efficiency to a school facility and cost savings to the public school district.

Applications and program guidelines are available on the program website at <http://commerce.mt.gov/quickstart/>



NREL's PV Watts Calculator determines the energy production and cost savings of grid-connected photovoltaic (PV) energy systems. It allows homeowners, installers, manufacturers, and researchers to easily develop estimates of the performance of hypothetical PV installations. Users can select a location and choose to use default values or their own system parameters for size, electric cost, array type, tilt angle, and azimuth angle.



Question of the Month

Does turning off computers really save energy?

Answer: Though there is a small surge in energy when a computer starts up, this



Image: ENERGY STAR

small amount of energy is still less than the energy used when a computer is running for long periods of time. For energy savings and convenience, consider turning off:

>>**the monitor** if you aren't going to use your PC for more than 20 minutes

>>**both the CPU and monitor** if you're not going to use your PC for more than two hours.

Make sure your monitors, printers, and other accessories are on a power strip/surge protector. When this equipment is not in use for extended periods, turn off the switch on the power strip to prevent them from drawing power even when shut off. If you don't use a power strip, unplug extra equipment when it's not in use.

Most PCs reach the end of their "useful" life due to advances in technology long

before the effects of being switched on and off multiple times have a negative impact on their service life. The less time a PC is on, the longer it will last. PCs also produce heat, so turning them off reduces building cooling loads.

For cost-effectiveness, you also need to consider how much your time is worth. If it takes a long time to shut down the computer and then restart it later, the value of your time will probably be much greater than the value of the amount of electricity you will save by turning off the computer.

Power-Down or Sleep Mode Features

Many PCs available today come with a power-down or *sleep mode* feature for the CPU and monitor. ENERGY STAR® computers power down to a sleep mode that consume 15 Watts or less power, which is around 70% less electricity than a computer without power management features.

ENERGY STAR monitors



have the ability to power down into two successive "sleep" modes. In the first, the monitor energy consumption is less than or equal to 15 Watts, and in the second, power consumption reduces to 8 Watts, which is less than 10% of its operating power consumption.

Make sure you have the power-down feature set up on your PC through your operating system software. This has to be done by you, otherwise the PC will not power down. If your PC and monitor do not have power-down features, and even if they do, follow the guidelines above about when to turn the CPU and monitor off.

Note: Screen savers are not energy savers. Using a screen saver may in fact use more energy than not using one, and the power-down feature may not work if you have a screen saver activated. In fact, modern LCD color monitors do not need screen savers at all. (Source: *EERE Energy Savers*)

For more information:

- www.energystar.gov
- www.energysavers.gov