

ENERGY TIDBITS – August 2009

Appliance Rebate Program has been announced by DOE. Approximately \$9.6 million from the American Recovery and Reinvestment Act will be available to the Bureau of Energy Systems, DELEG for rebate programs for consumer purchases of new ENERGY STAR home appliances. Michigan must first file an initial application expressing their intent to participate by August 15, followed by a full application by October 15. The Michigan Appliance Rebate Program will be designed to maximize energy and cost savings for Michigan consumers, complement the new utility energy optimization programs, and minimize administrative expenses.

Energy Efficiency and Conservation Block Grant solicitation will be issued in August by the Bureau of Energy Systems to incorporated local governments not eligible for the direct entitlement grants from DOE. Check www.michigan.gov/energyoffice for additional information and the Request for Proposals.

\$15 Million Clean Energy Manufacturing Request for Proposals has been issued by the Bureau of Energy Systems. DELEG is offering small manufacturing companies, currently located in Michigan, financial assistance to diversify into high-growth clean energy sectors and invest in advanced manufacturing of renewable energy systems and components (i.e. wind turbine systems, solar technology, bio-energy equipment, geothermal heating and cooling systems). Due date is August 14. www.michigan.gov/energyoffice

Governor's Residence is getting greener and now has a wind turbine and soon solar panels. The wind turbine is a 30 ft Mariah Power Windspire built by MasTech in Manistee. The solar panels will be from another Michigan company United Solar Ovonic. A new sprinkler system saves water by taking into account the weather and what's planted and the garage roof has a green roof covered with sedum plants and a special membrane to keep it cool. Fluorescent and LED lights have been installed and a programmable thermostat controls heating and cooling.

Green Energy package of bills was unveiled in Lansing by a coalition of House Democrats, business leaders and clean energy advocates. The plan would require that 30% of the state's electricity come from renewable sources by 2025. The existing requirement is 10% by 2015. The package also would require utilities to work with their customers to decrease energy use by 2% per year, and

require upgrades in building energy codes. The package includes 11 bills that will be introduced over the next several weeks.

Consumers Energy has posted information about their energy optimization programs at <http://www.consumersenergy.com/welcome.htm>.

Detroit Edison has posted information about their residential energy optimization programs at <http://www.dteenergy.com/residentialCustomers/saveEnergy/>.

Detroit Edison has posted information about their business energy optimization programs at <http://www.dteenergy.com/businessCustomers/saveEnergy/>.

Huron Area Technical Center will start a new program this fall that will be the first stand-alone wind turbine technician program at a career technical center in the state. This new program has received financial support from the Saginaw Bay Watershed Initiative Network (WIN) and an Alternative Energy Training Program grant through the Michigan Department of Education. The WIN funding will assist in the purchase of two wind turbines, one horizontal and one vertical. The vertical-style wind turbine, called Windspire, is produced in Michigan by Mariah Power. The two new turbines will allow students to learn about residential turbines, but students will also learn about commercial turbines. The wind turbine technician program will be run through the HATC electrical program and it will be in accordance with a similar program being instituted at Delta College. HATC students in the new program could earn college credit through Delta College and take these credits to Delta College to acquire a wind turbine technician associate degree.

Michigan State University has been tinkering with class schedules and has saved 211 megawatt hours, 137 tons of carbon dioxide and \$16,904. During 2008-09, seven university buildings participated in a pilot program to schedule evening classes and events more efficiently. Classes and events were typically moved to a building next door or in the same geographic area. MSU will expand the program to include more buildings in the upcoming academic year.

American Clean Energy and Security Act (ACESA; HR 2454) passed the U.S. House of Representatives by a narrow vote of 219 – 212. The comprehensive bill, referred to as "Waxman-Markey" for its sponsors, is a landmark piece of legislation for addressing climate and energy issues. The carbon dioxide Cap and Trade provisions were the most controversial portion of ACESA, but the bill contained many other provisions for energy efficiency and renewable energy. Among these are a Combined Efficiency and Renewable Electricity Standard with a cumulative goal of 20% by 2020 and more efficient building codes and appliance standards. The Senate Committee on Energy and Natural Resources also reported their version of an energy bill in mid-June, the American Clean

Energy Leadership Act (ACELA). ACELA, like its House counterpart, has a combined efficiency and renewable energy standard, though it only reaches a cumulative 15% savings level.

Detroit Zoological Society continues on the road to “green” by replacing its gas-powered golf carts with solar-electric hybrid carts. The 40 golf carts are used by the Detroit Zoo’s animal, maintenance, landscaping, park safety, education, events, marketing and public relations staffs to transport equipment and people around the 125-acre zoo. By replacing fossil fuel with solar, the zoo is reducing its carbon dioxide emissions by 450 pounds a year.

Five Cities have joined the Southeast Michigan Regional Energy Office - Madison Heights, Ferndale, Roseville, Lincoln Park and Farmington Hills. The cities will use the Energy Office to leverage their Energy Efficiency and Conservation Block Grant funds. The Southeast Michigan Regional Energy Office was founded in 2008 by Michigan Suburbs Alliance, WARM Training Center, Southeast Michigan Council of Governments and Michigan Municipal League. www.michigansuburbsalliance.org/regional_cooperation/energy_office/

Crystal Spa, Crystal Mountain in Thompsonville is continuing to lead in its push for renewable energy consumption. The 18,500 square-foot facility is the only LEED certified (Leadership in Energy and Environmental Design) spa in the Midwest and one of just six in the U.S. The building’s design includes features that maximize energy efficiency like groundwater heat pumps, an automated heating and cooling control system and compact fluorescent lighting. Eco-friendly flooring and wall coverings were used as well as Icynene foam insulation. www.crystalmountain.com

Kalamazoo Valley Community College's inaugural Wind Energy Camp had eight kids learning about the power and possibilities behind wind. Trevor Stefanick, a physics instructor at KVCC and head of the four-day camp, said the daily, four-hour sessions, designed for children between the ages of 12 and 16, have been a great primer for kids interested in renewable energy. Using simple science concepts and build-your-own wind-turbine kits, the campers learned about differences between renewable and nonrenewable energy and how wind turbines work and are designed. Each camper builds his or her own turbine, testing out different blade designs, placements and materials.

Construction on Flint's New Biogas Plant is expected to begin next month. The plant could be up and running at the city's wastewater treatment facility in Flint Township by next summer. The technology, originally developed in Sweden, will

produce methane gas used to generate electricity, heat buildings or power cars and trucks. Svensk Biogas has spent 15 years refining the biogas process.

MSU Land Policy Institute and Michigan Citizen Planner offered training last fall and this spring across Michigan on Wind Energy Siting and Policy Issues. These workshops covered a wide variety of issues concerning wind energy, with a focus on wind facility siting and regulation. Due to the overwhelming response to the workshop series, Michigan Citizen Planner is now offering this workshop online. <http://www.citizenplanner.msu.edu/onlinemodulewnd.html>

Dow Corning Corp. has been awarded a \$745,189 grant from the U.S. Dept. of Energy to develop a lifetime lubricant for gearboxes used on wind turbines. The Michigan Aerospace Corp. in Ann Arbor will receive \$748,002 for a turbine reliability study and the University of Michigan will receive \$413,534 for a study on voltage control and transient stability. The money will come from funding through the American Recovery and Reinvestment Act signed into law in February.

Green Lodging Michigan has over 55 facilities that have been certified and recognized for implementing energy efficiency and green practices. AAA will now include an "eco" icon in its 2010 TourBook editions to indicate properties that promote environmental and energy conservation and Green Lodging Michigan facilities will be identified. When you travel, think green and Green Lodging Michigan. www.michigan.gov/greenlodging

Gov. Jennifer Granholm has returned from an international trade trip and announced that a German battery technology company plans to search for a manufacturing location on the west side of the state. Fortu PowerCell soon will begin a site search pending approval of state and local tax incentives. The company would build a battery pack manufacturing facility. Governor Granholm also met with Belgium-based Hansen Transmissions, a producer of wind energy gearboxes, to promote Michigan as a possible location for a service and repair facility.

Taylor School Board has approved sponsored Solar School Bus Stop Lights, through the National Adopt-A-Watt Program. The program will increase safety for school children and generate new revenue for clean energy projects for both the Taylor schools and City of Taylor. It is projected that 50 new solar lights will be installed at school bus stops in Taylor. Sponsorships of \$2,000 per light will completely pay for the lights.

Michigan Wind Energy Resource Maps can be found at www.michigan.gov/eorenew. Maps show both on-shore and off-shore potential. We just added two new links to additional resources. The Land Policy Institute, MSU has developed a Wind Prospecting Tool to help the wind energy industry identify suitable areas for development. AWS Truewind has launched windNavigator® which allows users to explore wind resources across the United States at a 2.5 km resolution for free. windNavigator also makes high-resolution (200 m) maps easily obtainable through online purchasing options.

Energy Tidbits is free and is prepared by John Sarver, Michigan Dept. of Energy, Labor, & Economic Growth. To subscribe, contact sarverj@michigan.gov. Previous copies can be found at www.michigan.gov/energyoffice under Publications.