

## ENERGY TIDBITS – December 2009

Efficiency United has launched its energy efficiency program for the 11 Michigan utilities that opted to use a third-party administrator. On Aug. 10, the MPSC designated the Michigan Community Action Agency Association (MCAAA) as Michigan's Energy Optimization Plan Administrator. Utilities offering the Efficiency United program are: Alpena Power, Bayfield Electric Cooperative, Daggett Electric Department, Edison Sault Electric Company, Indiana Michigan Power, Xcel Energy, Upper Peninsula Power Company, WE Energies, Wisconsin Public Service Corp., Michigan Gas Utilities, and SEMCO Energy Gas Company. More details at 877-367-3191 or [www.encyciencyunited.com/](http://www.encyciencyunited.com/)

Michigan State University has been awarded \$83,806 by the Bureau of Energy Systems from American Recovery and Reinvestment Act funding to install anemometers on five Michigan Public Safety Communications System (MPSCS) towers. The anemometers will accurately measure wind speeds at three heights, allowing MSU to assess Michigan's wind energy potential. Most publicly-available wind speed data has been gathered at relatively low heights. Since most commercial wind turbines are 70 to 100 meters in height, Michigan needs tall tower wind speed data to accurately measure the state's wind energy potential. The five towers will be in Gratiot, Delta, Antrim, Mason, and Hillsdale counties.

2010 Michigan Energy Conference will be held at Ferris State University on April 7-8, 2010. FSU Energy Center is seeking proposals for presentations and case studies to be presented at the conference. The conference will consist of one day of focused workshops and one day of technical breakout sessions. Please provide intent to submit by Nov. 30. Contact Arn McIntyre, [mcintyal@ferris.edu](mailto:mcintyal@ferris.edu) or 231-591-5817.

Proposals are being solicited by Bureau of Energy Systems, DELEG for technical assistance to non-entitlement cities, villages, townships and counties that receive State of MI Energy Efficiency & Conservation Block Grant (EECBG) Multipurpose and/or LED Demonstration grants. The EECBG Technical Assistance Request for Proposal (RFP) has been posted at [www.michigan.gov/energyoffice](http://www.michigan.gov/energyoffice). Technical Assistance award winners will provide services that help EECBG sub grant recipients to develop and implement energy efficiency and conservation strategies, programs and project plans, and will provide other technical assistance as needed. The total available grant funding is \$195,996 and it is expected that three to eight grants will be awarded. Eligible applicants include statewide and regional local government associations and councils, Rebuild MI Community Partnerships, Energy Centers, and other Michigan-based nonprofit organizations with experience in delivering energy and/or environmental services to public agencies. Applications for grants are due by 5 p.m. on Wednesday, December 30.

Green License Plate is being introduced by Ontario next year. The plate, which features a green border and lettering, is expected to be available as part of Ontario's Electric Vehicle initiative, which begins July 1. Green plates will only be for plug-in hybrids and battery-only powered cars. Drivers who get the plates will be allowed to travel in high occupancy

vehicle lanes even if there's only one person inside. There'll also be access to recharging facilities at GO Transit and other provincially operated lots, and parking spots will be set aside at places like Wal-Mart and the University of Toronto. The McGuinty government's plan is to have one out of every 20 passenger vehicles on Ontario's roads be an electric vehicle by 2020.

Biomass Energy Demonstration Project grants (total \$74,296) have been awarded by Bureau of Energy Systems to Lansing Board of Water & Light (LBWL), Wyandotte Municipal Services (WMS), and Michigan Technological University (MTU). Grants received by the utility companies will demonstrate the feasibility of co-firing various biomass fuels in their existing generating facilities. The LBWL project will focus primarily on evaluating the impacts of N-Viro Fuel™, a fuel derived from a blend of organic wastes, on equipment and emissions. The WMS project will investigate the logistics of acquiring and handling various woody biomass fuels. The Michigan Tech study will evaluate the potential for operating snowmobiles on a higher ethanol-blended fuel (i.e. E15, which is 85% gasoline and 15% ethanol). This demonstration will be conducted in conjunction with the annual Clean Snowmobile Challenge competition in March. [www.michigan.gov/biomass](http://www.michigan.gov/biomass).

Michigan Career and Technical Institute (MCTI) students became the first in Michigan, and second in the nation to become certified photovoltaic installers by the Electronics Technicians Association (ETA) International. MCTI provides vocational and technical training for adults with disabilities and is operated by Michigan Rehabilitation Services within DELEG. The seven MCTI students successfully completed the technical examinations and requirements to be a Photovoltaic Installer (Level 1). The Alternative Energy Option is a three-term course that covers DC electronics, AC electronics, and several areas in alternative energy: solar, wind, fuel cells, microhydro and biofuels. Students can earn two certifications from MCTI: PV solar installer certification and small wind turbine installer certification.

Norbert Mueller and a team of MSU engineers and scientists have received a \$2.5 million DOE grant to build a new car engine with five times current fuel efficiency and 30% less cost. Called a wave disk generator, or WDG, it builds on work already done in MSU labs converting gaseous or liquid fuel sources to electrical power. "Our goal is to enable hyper-efficient hybrid vehicles to meet consumer needs for a 500-mile driving range, lower vehicle prices, full-size utility, improved highway performance and very low operating costs," Mueller says. "The WDG also can reduce carbon dioxide emissions by as much as 95% in comparison to modern internal combustion vehicle engines."

Energy Efficiency & Conservation Block Grant (EECBG) deadline was Nov. 5. The Bureau of Energy Systems received 269 proposals requesting over \$30 million. \$17.4 million is available. 88 LED Demonstration and 181 Multi-Purpose proposals were received.

Oakland University will receive a \$2.75 million grant to install a geothermal heat pump system at the new Human Health Sciences Building. The proposed design will make use

of variable refrigerant flow heat pumps, solar-thermally activated desiccant outdoor air supply, and multiple methods of waste heat recovery.

<http://apps1.eere.energy.gov/geothermal/projects/projects.cfm/ProjectID=106>

Newest Solar Product from Energy Conversion Devices can be found on one of Michigan's most prominent residences, the governor's mansion. The EnerGen solar system, which produces 3.2 kW of power, covers the ranch home in the Moores River Drive neighborhood of Lansing. The solar system is made of thin-film flexible solar laminates incorporated into roofing shingles. This product developed by the Rochester Hills-based PV firm and roofing-specialist Certain Teed is slated for an official launch next year.

Efficiency Standards for TV's have been adopted by the California Energy Commission. After ten years, the Commission estimates the regulations will save \$8.1 billion in energy costs and save enough energy to power 864,000 single-family homes. The new standards create the first ever active mode power limits for TVs. Given that the average new set operates nearly five hours a day and is considerably larger than the one it replaced, putting a lid on active mode energy use is important. The CEC also revised the state's existing 3 watts standby-passive mode power usage standard to 1 watt. Massachusetts may be next. A legislative hearing last month paved the way for the Bay State to adopt TV standards. [www.energy.ca.gov/appliances/tv\\_faqs.html](http://www.energy.ca.gov/appliances/tv_faqs.html)

Ann Arbor DDA Downtown Energy Saving Grant Program is now into its second year. As of September 30<sup>th</sup>, 34 businesses had received audits that had identified \$883,000 in energy improvements with a savings of \$178,300/yr. For example, Neutral Zone Teen Center upon receiving their energy audit committed to investing \$40,000+ in energy improvements. The improvements resulted in installation of insulation and more energy efficient heating and cooling equipment with an estimated energy savings of \$5,600/yr. A new component added to the program is a partnership with the City of Ann Arbor Energy Office to make zero interest loans available through a federal grant.

[http://www.a2dda.org/current\\_projects/downtown\\_energy\\_saving\\_grant\\_program/](http://www.a2dda.org/current_projects/downtown_energy_saving_grant_program/)

Massachusetts has petitioned US DOE to allow the state to enforce a gas furnace efficiency standard significantly stricter than the federal standard – a move that could save Massachusetts consumers approximately \$144 million in heating costs between 2013 and 2030. The proposed 90% efficiency standard would save the average household buying a natural gas furnace at least \$3,600 in natural gas costs over a 20-year furnace life or \$180 in annual fuel costs. US DOE has up to one year to act on the Commonwealth's waiver petition.

Whirlpool Corp. said its appliances will be featured in a new line of high-quality, affordable, sustainable kit homes. The American Sustainability Initiative -- or AmeriSus, for short -- will launch in January with a goal of placing 12,000 affordable sustainable homes throughout 15 states over the next two years. Each of these homes will feature energy-efficient Whirlpool brand appliances.

University of California (UC) campuses have been working with the California Lighting Technology Center (CLTC) at UC Davis to retrofit inefficient lighting technologies with EverLast® Induction Smart Light fixtures. To date, 30% of UC campuses are achieving energy and cost savings due to the implementation of these fixtures in roadway, walkway, parking lot and garage structure applications. [www.everlastlight.com/](http://www.everlastlight.com/)

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