

ENERGY TIDBITS – September 2010

Time is Running Out for State Appliance Rebates! 72% of clothes washer, refrigerator, and dishwasher rebates have been spent or reserved. 90% of furnace and hot water systems rebates have been spent or reserved and additional applications will now be processed on a first come basis with no guarantee of receiving a rebate. Michigan Energy Efficient Appliance Rebate Program has already spurred over \$47.5 million in consumer spending in Michigan and provided over \$5.3 million in rebates to 75,000 Michigan consumers. The program is funded by the American Recovery and Reinvestment Act of 2009. More information at www.mirebates.com or call call 1-866-621-8782 (refrigerators, clothes washers, dishwashers) or www.michrebate.com or 1-888-642-4674 (furnaces, water heaters).

Vortex Hydro Energy, a spinout from the University of Michigan, has installed its first major “hydrokinetic” power generating device in the St. Clair River off Port Huron. Vortex has commercial rights to the research of Michael Bernitsas, a professor of naval architecture and marine engineering at UM. He’s been studying the technology, called VIVACE -- for Vortex Induced Vibration Aquatic Clean Energy -- since 2005.

Curtis A. Hertel, Sr. was recently appointed as DELEG Deputy Director for Energy Programs. Mr. Hertel brings a wealth of legislative and policy experience to DELEG from his previous nine terms in the Michigan House of Representatives, with the last three in major leadership positions, including Co-Speaker and Speaker. Most recently, he served as Executive Director of the Detroit/Wayne County Port Authority.

Wind Power additions in the U.S. set a new record in 2009, with 10 GW of new capacity installed, representing a \$21 billion investment. Wind power accounted for 39% of all new electric generating capacity added in the U.S. in 2009. Wind turbine equipment manufactured domestically grew from 50% in 2008 to roughly 60% in 2009. Wind power now provides more than 10% of in-state electricity generation in 4 states: Iowa (20%), South Dakota (13%), North Dakota (12%), and Minnesota (11%). Source: 2009 Wind Technologies Market Report <http://eetd.lbl.gov/ea/ems/re-pubs.html>

GE has announced a \$200 million open innovation challenge that seeks breakthrough ideas to create a smarter, cleaner, more efficient electric grid. Entries will be evaluated as candidates for both a potential future commercial relationship as well as a \$100,000 innovation challenge award. The global challenge invites technologists, entrepreneurs and start-ups to share their best ideas via ecomagination.com.

Ford Motor, Detroit Edison, Xtreme Power and the State of Michigan are teaming up to build a 500 kW PV system and 10 electric vehicle charging stations at Ford’s Michigan Assembly Plant in Wayne. The system will be integrated with a 750 kW energy storage facility that can store two million watt-hours. The Michigan Assembly project is made possible by a \$3 million investment by Detroit Edison’s SolarCurrents program, a \$2 million grant from the Michigan Public Service Commission in support of the state’s smart-grid initiative, and approximately \$800,000 from Ford.

Eight New Coal-Fired Plants were proposed in Michigan 3 years ago. The State recently denied air quality permits for the last proposed coal-fired plant that requested one. The Department of Natural Resources and Environment said Holland's Board of Public Works can't build a new 78 MW plant to replace a smaller, older one because it's not needed. In February 2009, Governor Granholm issued an executive order requiring applicants for new coal-fired plants to prove need and that there were no viable alternative sources. Since then, none of the proposed plants has moved forward, either because the State denied permits or the companies changed plans. The State approved permits in December for CMS Energy's new coal-fired plant near Bay City, but CMS has put the \$2 billion project on hold.

Altair Engineering research work in Troy on LED bus lights eventually led to the creation of LED replacements for fluorescent light tubes. Altair established a subsidiary called Ilumisys that is moving production of the replacement tubes from China to Michigan next year. Ilumisys' new factory eventually will employ 213 workers.

<http://www.freep.com/article/20100829/BUSINESS06/8290474/1019/Business06/State-becomes-center-for-lamp-industry-from-small-to-large-companies#ixzz0y5lpFCfW>

Genoa Charter Township Hall has installed five wind turbines (1.2 kW each) for a total of 6 kW and a 3.5 kW PV system. The hybrid system is expected to provide approximately 20% of the Township Hall's electrical needs. The Township received an EECBG grant from DELEG, Bureau of Energy Systems and the Township contributed \$8,800 in personnel and contractual services. The Windspire® wind turbines were manufactured in Manistee & installed by Contractor's Building Supply www.windowwindandsolar.com.

East Michigan Chapter of the Association of Energy Engineers will be meeting on September 14 in Room C406 of the Alfred Taubman Student Service Center at Lawrence Tech. Meeting is free to Chapter Members and \$25 for guests. Meeting begins at 5 pm, with dinner at 6 pm followed by a presentation. See www.emacee.org for details.

Home Appliance Manufacturers and energy efficiency advocates have agreed on improved efficiency standards and tax policies for refrigerators, freezers, clothes washers, clothes dryers, dishwashers and room air conditioners. In addition, they have called for inclusion of "smart grid" readiness as a feature of future ENERGY STAR appliances. For example, new standards would reduce new refrigerator and freezer energy use by up to 30% by January 2014. www.aham.org/agreement.

Coldwater Board of Public Utilities (CBPU) trustees have recommended that Coldwater City Council enter into a contract to bring solar power to the city. Standard Energy has surveyed power plant sites in CBPU service area, selected several as potential locations for solar arrays, and indicated there is a potential for 8 MW in Coldwater. Standard Energy has agreed to develop solar power plants with American Municipal Power that will provide up to 300 MWs of electricity in six states. Coldwater is a member of AMP.

Green Building Commercial Training will be held October 5, 8-5 at IHM Motherhouse in

Monroe. This program presents sustainable green building construction in a holistic way for builders, developers, contractors, subcontractors, suppliers, construction trades, design professionals, facilities management staff, code officials, municipal zoning and planning departments. This training program prepares trainees for the Green Advantage Certification Exam on October 12. Register at TRAINING

Detroit Thermal LLC, is tying together 7 downtown Detroit Wayne County buildings as part of the continuing growth of the underground steam energy system serving Detroit from the riverfront to the New Center area. Recently new service connections were completed to the Rehabilitation Institute of Michigan, part of the Detroit Medical Center.

Clean Energy Prize encourages economic development in Michigan by harnessing the innovation and creativity of our college students. The Clean Energy Prize awards \$100,000 in prizes and in-kind services to student-based teams to draw emerging technologies to the state of Michigan. www.micleanenergyprize.com

Experimental Electric Vehicle Tariff for Detroit Edison has been approved by the MPSC making it the first utility in Michigan to offer specific rates for electric vehicles for residential customers. Most customers enrolled under this tariff will receive a separate meter that is capable of recording the time of day and the energy used to charge the electric vehicles. Eligible customers will be provided two options: one that provides a lower rate for charging during off-peak hours and another that provides for a monthly flat fee of \$40 per vehicle. Detroit Edison will, at the customer's option, fund up to \$2,500 for the separately metered circuit including the approved charging station; or if the approved charging station is provided by the manufacturer, Detroit Edison will fund up to \$2,500 for the separately metered circuit and the installation of the charging station.

Detroit Edison has 20-year contracts with WM Renewable Energy and L'Anse Warden Electric for 20 MW of renewable energy. Detroit Edison will purchase 17 MW from the L'Anse Warden wood waste biomass facility in Baraga County and 3 MW of landfill gas capacity from WM Renewable Energy in Lake Orion.

Certified Energy Manager (CEM) 5 day course and exam will be offered in Detroit on October 25– 29 at Westin Book Cadillac.

<https://www.aeeprograms.com/seminars/calendar.htm>

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