

ENERGY TIDBITS – November 2009

Michigan Appliance Rebate Plan has been submitted to DOE and has been posted at www.michigan.gov/energyoffice in the ARRA box. Appliances proposed for rebates are Consortium for Energy Efficiency (CEE) Tier 3 refrigerators, CEE Tier 2 dishwashers, CEE Tier 3 clothes washers, ENERGY STAR oil furnaces, propane furnaces (AFUE 95%) and water heaters (EF \geq .67), and ENERGY STAR solar water heaters. With the exception of clothes washers, rebates would not duplicate rebates being offered by utility energy optimization programs which include air conditioners, clothes washers, dehumidifiers, natural gas furnaces and water heaters, and CFL's. The start date has not yet been determined and will be after DOE approval.

Interstate Renewable Energy Council (IREC) has recognized Governor Granholm with its "innovation through state government leadership award" for the creation of DELEG as a way for the state to strategically rebrand itself and aggressively compete nationally and internationally in the development of advanced energy technology. The award was made in conjunction with the 2009 Solar Power International Conference held in Anaheim, California on October 26th. Through Executive Order 2008-20, Governor Granholm reorganized several State of Michigan departments to create the Department of Energy, Labor, and Economic Growth, and named Stanley "Skip" Pruss the Director of DELEG.

Consumers Energy has began the roll-out of \$6 million in incentive checks by year-end for its energy efficiency program. More than \$31 million in incentives will be distributed by Consumers Energy by the end of 2011 to business customers for energy efficiency projects. The first recipient is Swartz Creek Community Schools, which received an incentive check for \$2,137 for energy efficiency measures to control lighting. Customers may learn more about Consumers' energy efficiency programs and how to apply for project incentives by visiting www.consumersenergy.com

Turkey Litter is being converted at a Howard City grain feed mill into steam, electricity and fertilizer with a \$3 million biomass energy plant developed by a small Kentwood company, Heat Transfer International. Sietsema Farms Feeds is roasting 70,000 pounds of turkey waste a day to generate 206,400 pounds of steam and 500 kWh's of electricity to power a grain mill that prepares bird feed. The turkey waste is gathered from several West Michigan turkey facilities. The technology was developed in Michigan, thanks in part to a \$2.3 million state grant and a \$500,000 federal grant.

Energy Conversion Devices & CertainTeed have announced the installation of EnerGen on the official residence of Governor Granholm. EnerGen is the first product developed through a joint venture announced between the two companies in October 2008, and is slated for official launch in 2010. EnerGen combines Uni-Solar's expertise in photovoltaics with CertainTeed's leadership in residential roofing to create a solar roof system that integrates solar with roofing shingles. The two companies donated a 3.2-kW system for Granholm's official residence in Lansing.

Michigan Solid-State Lighting Association (MSSLA) has announced the official launch of its organization. MSSLA was established in a collaborative effort with Michigan corporations, universities, and state agencies engaged in manufacturing, research or development of solid-state lighting products. The MSSLA mission is to help ensure that Michigan becomes a global leader in solid-state lighting through knowledge sharing, education and public policy advocacy. Founding members of the MSSLA include DTE Energy, ilumisys, LEDOS, Lumatek International, Midwest Circuits, Relume Technologies, Michigan Department of Energy, Labor & Economic Growth, University of Michigan, Wayne State University and XUS LED Lighting.

2009 Michigan Solid-State Lighting Association Symposium will share the latest advancements and insights into the benefits of solid-state lighting on Nov. 12 at the University of Michigan - Dearborn, Fairlane Center, North Building, Room Quad E. Interested participants are encouraged to pre-register by Nov. 9. Attendees will learn about real-world applications of solid-state lighting, interact with exhibitors, and network with hundreds of commercial and industrial professionals. Keynote speaker Mike Bergren, former assistant field operations manager for the City of Ann Arbor, will discuss the city's LED implementation program, which is replacing 1,000 streetlamps with LEDs with plans to change all 7,000 Ann Arbor streetlamps to LED.
www.dteenergy.com/businessCustomers/saveEnergy/events/seminarRegister.html

DTE Energy has been awarded a \$84 million DOE grant that will allow the company to move forward with its SmartCurrents program. The DOE funding will be matched by the company and its partners, bringing the total investment to \$170 million. Advanced metering infrastructure (AMI) is the backbone of the SmartCurrents program. DTE has piloted AMI in Grosse Ile and is installing new meters on Harsen's Island and in a portion of Bloomfield Township. The program includes Smart Home which will provide different pricing levels for off-peak electrical usage, web-based customer energy usage and customer outage notification. Certain "smart" appliances could communicate with DTE to provide optimum energy savings. As a result of the DOE funding, DTE will install 700,000 new meters, offer Smart Home technology with in-home displays and high tech thermostats to 5,000 customers, and make improvements to 11 substations and 55 circuits over the next two years.

LaFontaine Automotive Group of Highland has received Gold LEED Certification on the dealership's 63,000-sq-ft facility. The \$15 million facility is the first GM dealership in the country to qualify for Leadership in Energy and Environmental Design certification. A special car wash system recycles 85% of the water used by conventional car washes. The facility's centerpiece and most costly single expenditure at \$600,000 is a 64-well geothermal system that heats and cools the building by capturing energy stored in the earth 350 feet below the building. Eighty-five skylights fill the facility with natural light and reduce the need for artificial lighting and special prisms magnify the light for even more efficiency. Sophisticated photocells and computer-controlled lighting helps ensure lights are turned off in unused areas and can turn off lighting when there is enough daylight. The service department fills customers' vehicle tires with nitrogen vs. compressed air because the unique properties of nitrogen can improve fuel economy. A

windmill generates energy to pump retention pond water for irrigation.

First Light Solar Park, located in Lennox and currently the largest PV operation in Canada, has begun generating electricity. With more than 126,000 solar panels across 90 acres, this farm is expected to generate more than 10 million kWh's in its first year. Since October 2003, Ontario has added more than 1,200 MW of new, renewable generation, including more than 150 solar projects of varying sizes.

Rouge Woods Apartments, being redeveloped by nonprofit Northwest Detroit Neighborhood Development and for-profit Capacity Development, LLC, isn't the first green project for the developers. They consulted with WARM Training Center in Detroit to do an energy audit and come up with a strategy to make the 3-story building green. The major green element is geothermal heating and cooling, eighteen 300-ft wells. Each unit will have a heat pump that will control the flow of air. The development also will feature an exercise room that recycles energy from the residents' use of the equipment to power some of the smaller equipment in the room. The developers hope that it will encourage exercise while generating electricity at the same time. Other green elements include energy-efficient windows, Energy Star appliances, and drought-tolerant landscaping. With all the green elements, residents will save 30-35% on their electric bills.

National Academy of Sciences has released a study indicating that burning fossil fuels costs the United States about \$120 billion a year in health costs, mostly because of thousands of premature deaths from air pollution. The damages are caused almost equally by coal and oil, according to the study which was ordered by Congress. The study set out to measure the costs not incorporated into the price of a kWh or a gallon of gasoline or diesel fuel. The estimates by the academy do not include damages from global warming. Coal burning was the biggest single source of such external costs, but the variation among coal plants was enormous. The worst plants, generally the oldest and burning coal with the highest sulfur content, were 3.6 times worse than the average.

Dow Chemical has unveiled its line of Dow Powerhouse Solar Shingles, photovoltaic solar panels in the form of solar shingles that can be integrated into rooftops with standard asphalt shingle materials. The solar shingle systems are expected to be available in limited quantities by mid 2010 and more widely available in 2011.

Sustainable Solutions for the Contracting Industry will be held at West Shore Community College on Nov. 10, 6-9pm and at Glen Oaks Community College, ISD Building on Nov. 12, 2-5pm. Building Science Academy will present on opportunities in the retrofit market, update on utility programs, What is Home Performance? and examples of energy efficiency retrofit projects. 616-887-2311 or Brandi@buildingscienceacademy.com

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.