



# Energy Edge

A NEWSLETTER FOR MEMPHIS LIGHT, GAS AND WATER DIVISION GENERAL POWER CUSTOMERS  
MAY 2009

## Federal stimulus funds allotted to City, County and surrounding municipalities

### MLGW and other City Divisions submit proposals to implement \$6.7 million in Energy Efficiency and Conservation Block Grant funds

By now, most everyone has heard of the sweeping \$787 billion American Recovery and Reinvestment Act (ARRA), passed by Congress and signed by President Obama in February 2009. The legislation earmarked funds for hundreds of government programs, grants and initiatives to be implemented at the community level. Missing from the legislation, however, is a concise explanation of how funds migrate from Federal budgets to households, businesses and organizations.

Many of you have contacted MLGW to ask such questions, so we've prepared this summary of the funding process for Energy Efficiency and Conservation Block Grants (EECBG), along with information about MLGW's involvement. We'll summarize other portions of ARRA in future issues, as details are available.

### EECBG Funding Process

- A national total of \$3.2 billion has been earmarked to support EECBG, which was created by earlier legislation but never funded. Of this amount, 88% is distributed to states by formula, with the remaining amount (\$400 million) available at a later date for competitive grants.
- Through the formula process, Tennessee was allotted \$42.2 million. Of that, \$6.7 million was earmarked for the City of Memphis, with smaller amounts (equaling less than \$1 million, combined) allocated to Shelby County, Bartlett, Collierville and Germantown.
- Allotments are not distributed to communities unless qualified proposals are submitted and approved—so, right now, the \$42.2 million Tennessee number is a goal, not a guarantee.
- EECBG funds can be used for energy efficiency, transportation efficiency, waste conversion, central heating/cooling districts, on-site renewable generation and public education.
- EECBG funds must be spent within two years of receipt, so "shovel ready" projects with quick implementation are more likely to be selected.

### MLGW Rates

MLGW's current and historic electric, natural gas and water rates are published at [www.mlgw.com](http://www.mlgw.com), along with updated Purchased Gas Adjustment and Fuel Cost Adjustment rates.

### Purchased Gas Adjustment (PGA)

MLGW Rate	Consumption	Demand
G-1 residential	(\$0.429)	na
G-7	(\$0.552)	na
G-8 / G-9	(\$0.658)	\$0.308
G-10 / G-12	(\$0.627)	na

Adjustment in \$/Ccf to published natural gas rates for meters read on or after 5/1/2009.

### Fuel Cost Adjustment (FCA)

TVA Rate Class	MLGW Rate Code	FCA Amount
GSA, Part 1	E-2	\$0.00843
GSA, Part 2	E-2	\$0.00843
GSA, Part 3	E-2	\$0.00834
Residential	E-1	\$0.00853
Outdoor Lighting	E-3	\$0.00854

Adjustment in \$/kWh to all firm kWh, beginning with meters read on 4/1/2009 and lasting for three consecutive billing periods.



### Important Contact Information

Commercial Resource Center:

Monday-Friday

7:30am-5:00pm Central

Phone: 901-528-4270

Fax: 901-528-4547

E-mail: [crc@mlgw.org](mailto:crc@mlgw.org)

Emergency: 901-528-4465

Outage: 901-544-6500

VIEW YOUR BILL ONLINE AT [www.mlgw.com](http://www.mlgw.com)

## MLGW's Involvement

- MLGW has developed a proposal to invest the City's \$6.7 million share in specific programs that address the energy efficiency needs of residential, commercial, industrial and institutional facilities. MLGW's proposal includes new and expanded programs that could be quickly scaled to invest short-term Federal funds and later re-scaled when funds are depleted. (Therefore, if only a portion of the requested funding is provided, MLGW still could offer the services, albeit to a smaller number of participants.) The proposal has been submitted to the City for review, along with proposals developed by other affected Divisions of City government pursuing these funds. Watch future issues of *Energy Edge* for specifics on MLGW's proposal.
- The City will determine which proposals to submit for Federal funding. If the Federal government approves, funds would then be released for program implementation. Program timelines mark proposal and review periods, with the expectation that funding for local projects would not occur before summer 2009.

"The Block Grants are a major investment in energy solutions that will strengthen American's economy and create jobs at the local level," said Energy Secretary Steven Chu. "The funding will be used for the cheapest, cleanest and most reliable energy technologies we have—energy efficiency and conservation—which can be deployed immediately."

## Impact on Your Business or Organization

As mentioned in the April issue of *Energy Edge*, there are very few new opportunities for businesses and organizations to benefit directly from ARRA. Instead, businesses retained access to Federal tax deductions for qualified facility energy improvements, first introduced in the Energy Policy Act of 2005. However, that doesn't mean new opportunities might not arise to benefit your business directly or indirectly. Now is the time to evaluate your building, perform preliminary energy audits and determine the availability of capital funds to make improvements. Armed with this information, you'll know what opportunities are feasible for Federal tax deductions, plus you'll be in a stronger position to act should new programs be funded locally. Indirect stimulus benefits may be in your business' future if you provide products or services associated with energy efficiency and conservation. MLGW encourages you to start evaluating and planning today!

## Business Energy Advisor updates vital facility efficiency information

Each quarter, web content in the Business Energy Advisor is updated to provide the most current, concise resource on energy efficiency, new technologies and O&M best practices. The following sections were recently updated, so we invite you to visit MLGW's website to stay abreast of changes impacting your business.

### New O&M Advisor on Retro-commissioning

How would you like the opportunity to ensure that your building's energy systems and equipment are operating at their optimal levels while significantly reducing your energy costs? If you are ready to step up from piecemeal energy-efficiency measures and address the entire building energy system, then retro-commissioning (RCx) is for you. A comprehensive process rather than a set of prescriptive measures, RCx addresses a building's underlying system-level deficiencies rather than isolated quick-fix problems, yielding average whole-building energy savings of 15% and simple paybacks of 0.7 years. The new Operations & Maintenance Advisor on retro-commissioning, accessible through the Business Energy Advisor section of [www.mlgw.com](http://www.mlgw.com), will guide you through the RCx process and give you an idea of how it can work for you.

**1,864 users have accessed MLGW's Business Energy Advisor web content to find O&M tips, energy advice and other assistance since 1/1/2009. Have you?**

### Updated Commercial Energy Advisor on Managing Energy Costs in Grocery Stores

Managing grocery store energy costs is a daunting task, especially in uncertain economic times. However, there

are many no-cost and low-cost measures that store owners can implement that will yield significant energy and cost savings. Every \$1 in energy savings is equivalent to \$59 in sales, so even modest energy savings contribute to a stronger bottom line. To learn more about energy-saving opportunities, visit the updated Commercial Energy Advisor on this topic, located within the Business Energy Advisor section of [www.mlgw.com](http://www.mlgw.com).

### Updated Purchasing Advisor on CFLs

With many advances in lighting technology, compact fluorescent lamp (CFL) choices can be bewildering—you can select from an array of shapes, sizes and color temperatures. The ultimate choice will depend on both the specific fixture type and area's primary purpose. The updated Purchasing Advisor on CFLs, located within the Business Energy Advisor section of [www.mlgw.com](http://www.mlgw.com), provides the guidance you need to make the best selection.

### Updated Purchasing Advisor on Small Gas Boilers

We've just expanded our Purchasing Advisor on small gas boilers. This report now includes a discussion of the most widely used efficiency ratings and details about the various technological features today's gas boilers offer. We have also added information about how to make the best choice between models and provided a cost-effectiveness calculation that we hope will help you with your purchasing decisions. Check out this new Purchasing Advisor in the Business Energy Advisor section of [www.mlgw.com](http://www.mlgw.com).

### Updated Purchasing Advisor on Building Automation Systems

Are you looking for an easy way to reduce energy bills and maintenance costs? Building automation systems (BASs) often save between 5% and 15% of overall building energy consumption. Older or poorly maintained buildings can often save even more energy, sometimes yielding savings of over 30%. In addition to saving energy, BASs can reduce overall building maintenance costs by identifying operational problems early and often. Most new systems are web-based, which allows a user to access and view the system through the Internet using any device that has web browser capabilities. We've recently updated the Purchasing Advisor on BASs within the Business Energy Advisor section of [www.mlgw.com](http://www.mlgw.com) to reflect changes in communication protocols and new systems that can respond to utility price signals.

### Updated Purchasing Advisor on Insulation

These days everyone is looking for ways to lower their energy bills. One of the most productive ways to make your energy dollars go further may be to slow the flow of energy through your building envelope. Our recently updated Purchasing Advisor on insulation, accessible within the Business Energy Advisor section of [www.mlgw.com](http://www.mlgw.com), will inform you about the different types of insulating products that are available and how to identify the best opportunities for insulation upgrades in your building.

The Business Energy Advisor web content can be found at [www.mlgw.com](http://www.mlgw.com), under Commercial/Industrial, then Energy Saving Tools. (Since the content is hosted by a third-party application service provider, we cannot provide direct links to the articles—but it's worth your time to access them!)

## EPA releases new EnergyStar specs for commercial refrigeration



The U.S. Environmental Protection Agency announced new EnergyStar requirements for commercial refrigerators and freezers, which, on average, will be 33% more energy efficient than standard models. If all commercial refrigerators and freezers sold in the United States met the new EnergyStar specification, the energy savings would grow to \$275 million per year and prevent greenhouse gas emissions equivalent to those outputted from nearly 400,000 vehicles.

The requirements are effective 1/1/2010, the same date that new Federal manufacturing standards take effect. This revised specification will provide consumers with a choice to continue to go beyond the Federal standards with Energy Star, delivering energy efficient products with the performance they expect.

EnergyStar's commercial refrigerators and freezers specification addresses glass door refrigerators and freezers, which are typically found in convenience stores, supermarkets and restaurants. Glass door models can begin to qualify for Energy Star label as early as of 4/1/2009. Purchasers of commercial glass door refrigerators and freezers can expect to save up to \$800 per refrigerator and \$2,500 per freezer over the expected 10-year life of the product. More information on Energy Star qualified commercial kitchen products is available at: <http://www.energystar.gov/cfs>

## Millington company receives TN Clean Energy Technology Grant for 21-kW solar power generation project

Unistar Sparco Computers recently became the first company in West Tennessee to receive funding under the state's Clean Energy Technology (CET) Grant program. CET grants are awarded to businesses in Tennessee that install solar power generation, wind generation, solar water heating, solar hybrid lighting and fuel cells using renewable fuels.

Operated as a pilot by the Tennessee Department of Economic and Community Development, the CET program provides grants for 40% of the installed system cost, up to \$75,000. The minimum grant amount is \$5,000. Applicants agree to have an energy audit conducted for their facility as part of the process. Funds are provided after completion of the project; however, work cannot begin until applicants have received a CET notice to proceed.

CET grants are available only to businesses; residents, schools and other non-profit organizations are excluded. For information, visit [http://www.dsireusa.org/library/includes/incentive\\_2.cfm?Incentive\\_Code=TN50F&state=TN&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive_2.cfm?Incentive_Code=TN50F&state=TN&CurrentPageID=1&RE=1&EE=1)

In addition to the combined 70% funding for this solar project, Sparco will participate in TVA's Generation Partners program, which provides a financial incentive for each kilowatt-hour of solar power produced over 10 years. Sparco will consume 100% of its solar power output onsite, except for moments when facility load is less than solar generation at which time the excess will flow onto MLGW's electric grid. (Given the company's electric load, this is likely to happen only on days when the facility is closed for business.) To accommodate Generation Partners, MLGW installed a separate "generation meter" at the site to record solar output. Each month, MLGW will bill Sparco for the combined readings from the traditional electric meter (grid-supplied electricity) as well as the generation meter, then apply the generation credit for the amount recorded on the generation meter. In exchange for the payment, TVA receives all benefits of the solar output, including

### Solar Power Math:

Interested in solar power generation? Here's a real-life look at the numbers for this 21-kW solar project, which received 70% funding.

Estimated cost of installation:	\$150,000
Amount of CET grant (40%)	- 60,000
Amount of Federal tax credit (30%)	- <u>45,000</u>
<b>Net cost of installation, after all reimbursements (30%)</b>	<b>\$ 45,000</b>

TVA Generation Partners credit <sup>1</sup>	\$ 4,567
Simple payback on net cost <sup>2</sup>	9.85 years

1. NREL estimates annual solar output in the Memphis region at 1,300 to 1,600 kWh per kW installed. For this example, annual average Generation Partners credit was calculated using average 1,450 kWh x 21 kW, and current \$0.15 per kWh incentive rate.
2. However, if the Federal tax credit is the only funding received, the investment scenario flips and the business pays 70% of costs, for a simple payback of more than 23 years if also participating in TVA's Generation Partners program at the current incentive rate.

renewable energy credits. TVA and MLGW will release a new version of Generation Partners in late June. The new Generation Partners offering will include a slightly higher incentive rate and other changes to benefit customers. Watch future issues of *Energy Edge* for details.

## U.S. businesses, organizations can obtain bids for bulk purchases of energy-efficient products through EnergyStar web service

Just before Earth Day, the U.S. Department of Energy (DOE) announced that its *EnergyStar Quality Quotes* web service reached a new milestone—the 1,000<sup>th</sup> request from a U.S. business or organization seeking to purchase bulk quantities of energy-efficient equipment. Since its launch in 2006, the site has processed requests for a total of more than 5.8 million appliances and lighting products. U.S. companies, government agencies and other organizations who buy in bulk can use the site to get competitive bids from suppliers of EnergyStar-qualified light bulbs, light fixtures, dishwashers, refrigerators, room air conditioners, clothes washers and other products.

DOE developed *EnergyStar Quality Quotes* to expedite comparison shopping for energy-efficient products in the digital world. The web service provides a fast and easy way for institutional customers—such as multi-family building owners, public housing authorities, state and local governments and universities—to easily get competitive bids from EnergyStar suppliers. For more information, visit <http://www.quantityquotes.net/>

## BRIDGES hosts tours of unique green commercial facility

*Issues Ordinary to Extraordinary Challenge to spur greenhouse gas reductions in community*

BRIDGES, the Memphis youth and adult leadership development organization, took a principal role in addressing greenhouse gas reductions by issuing its *Ordinary to Extraordinary Challenge* (O2E) to residents and businesses in the community. At a kick-off ceremony on 4/21/09, BRIDGES staff introduced the campaign, which seeks to reduce greenhouse gas (GHG) emissions in Memphis by 10 million pounds annually.

O2E provides experiential, hands-on education and training for youth and adults to become leaders for environmental sustainability. In addition to a unique curriculum correlated with Tennessee educational standards, O2E includes community-based initiatives ranging from education and tours of the BRIDGES Center, to personal O2E Challenge pledges that residents, employees and clients can use to voice their support for environmental improvements through simple, daily acts—such as planting a tree, recycling water bottles, turning off the water while brushing your teeth, using compact fluorescent bulbs and buying green power through TVA's Green Power Switch program.



Participants can tour the BRIDGES Center, which features solar power generation, solar water heating and variety of green building techniques to reduce energy use and lower the facility's carbon footprint. The next community tour is scheduled for Thursday, 6/25/09. For information, call BRIDGES at 901-452-5600 or visit [www.bridgesusa.org](http://www.bridgesusa.org)

*Energy Edge* is published by the Commercial & Industrial Customer Care department of Memphis Light, Gas and Water Division. Comments and distribution list changes may be e-mailed to: [CRC@mlgw.org](mailto:CRC@mlgw.org)