



Energy Edge

A NEWSLETTER FOR MEMPHIS LIGHT, GAS AND WATER DIVISION GENERAL POWER CUSTOMERS
SEPTEMBER 2012

Participants sought for voluntary MLGW system peak demand reduction initiative

MLGW is finalizing plans for a voluntary initiative to send peak alerts to interested customers, who would react by reducing non-essential electricity use to help lower the overall system peak and resulting wholesale power costs. Interested businesses, organizations and households are being recruited for the pilot.

See the May/June/July issue of *Energy Edge* for more information about MLGW system peak demand and easy ways your business or organization can help control the peak.

Find more information and complete the appropriate survey(s) via links at www.mlgw.com/peakalerts. Feel free to share the survey with employees who may be interested in household participation.

Favorable natural gas market leads MLGW to revise base cost structure

No net impact on customer costs

MLGW updated the base cost of natural gas built into the Natural Gas Rate Tariffs beginning with meters read on 8/30/2012 to reflect current market trends in natural gas. The change yields no net impact on customer costs or MLGW revenues.

MLGW collects the base portion of natural gas costs through the rates shown on the Natural Gas Rate Tariffs. The remaining portion is collected through the Purchased Gas Adjustment (PGA). The PGA mechanism is used to adjust rates monthly to collect any differences between the actual cost of natural gas that MLGW incurs and the base amount. As the market moves up and down, the PGA rate follows.

Favorable market prices for natural gas have resulted in large negative PGA values that have greatly reduced overall gas costs in the last year.

The Purchased Gas Adjustment will continue to fluctuate monthly based on market trends, but customers can expect to see less dramatic PGA values listed on their MLGW bill as a result of the base cost restructuring.

MLGW Rates

MLGW's current and historic electric, natural gas and water rates are published at 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	(\$0.076)	na
G-7	(\$0.146)	na
G-8 / G-9	(\$0.230)	\$0.106
G-10 / G-12	(\$0.227)	na

Monthly adjustment in \$/Ccf to published natural gas rates for meters read on or after 8/30/2012.

Fuel Cost Adjustment (FCA)

TVA Rate Class	MLGW Rate Code	FCA Amount
GSA, Part 1	E-2	\$0.02524
GSA, Part 2	E-2	\$0.02524
GSA, Part 3	E-2	\$0.02494
Residential	E-1	\$0.02551
Outdoor Lighting	E-3	\$0.02555

Monthly adjustment in \$/kWh to all firm kWh, beginning with meters read on or after 8/30/2012.



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

Emergency: 901-528-4465

Outage: 901-544-6500

Maintenance,
Trouble and Gas

Pilot Safety: 901-820-7878

VIEW YOUR BILL ONLINE AT www.mlgw.com

Example for MLGW Customer on G-7 Natural Gas Rate

Meter Reading Date	Base Rate	PGA	Net Cost per CCF
7/1/2011	\$1.021	(\$0.040)	\$0.981
7/2/2012	\$1.021	(\$0.703)	\$0.318
8/30/2012	\$0.531	(\$0.146)	\$0.385

Example for MLGW Customer on G-8 or G-9 Natural Gas Rate using 200,000 CCF or less per month, excluding demand charges

Meter Reading Date	Base Rate	PGA	Net Cost per CCF
7/1/2011	\$0.987	(\$0.188)	\$0.799
7/2/2012	\$0.987	(\$0.787)	\$0.200
8/30/2012	\$0.488	(\$0.230)	\$0.258

Access the Natural Gas Rate Tariffs and historic Purchased Gas Adjustment table at <http://www.mlgw.com/commercial/commercialrates>

Shelby Farms dedicates area’s first solar-assisted Electric Vehicle Charging Station

Local leaders and electric vehicle enthusiasts gathered 9/19/2012 for the dedication of the area’s first solar-assisted Electric Vehicle Charging Station, located adjacent to the Visitor’s Center at Shelby Farms. The 10-space facility, funded by TVA and the Electric Power Research Institute (EPRI) at a cost of approximately \$500,000, will enable EV owners to charge their vehicles for free during park hours.

When TVA and EPRI approached MLGW with the offer to fund such a project in Shelby County, MLGW contacted Shelby Farms Park Conservancy as the organizations share common sustainability themes and parks users are often onsite for extended periods, conducive to recharging.

The station includes monitoring equipment that tracks details about charging sessions and other data, which MLGW, TVA and EPRI will use to analyze the impact of electricity as a transportation fuel.

While eight EVs were present for the ribbon-cutting, including one from MLGW’s fleet and two owned by attendees, EVs are still fairly unique in Shelby County. Officials expect public-access charging infrastructure located across Shelby County will help increase EV adoption.

In addition to the 10 EV charging slots, the project includes a 20 kW solar array installed as a canopy. The array shades the charging station and generates renewable power which Shelby Farms sells to TVA. The power is exported onto MLGW’s electric grid.

This is the 34th local solar project completed under TVA’s Generation Partners pilot program, which has ceased accepting applications due to its 9/30/2012 conclusion. About 20 other solar projects are under construction at homes and businesses in Shelby County under Generation Partners. TVA will introduce a new renewable generation incentive program, called Green Power Providers, in fourth quarter 2012. Watch future issues of *Energy Edge* for details, or check www.mlgw.com/greenpower for updates.



MLGW and two residents are among the first to charge their Nissan Leaf EVs at the solar-assisted charging station at Shelby Farms. Local car dealers displayed several models of the Chevy Volt at the ribbon cutting.

MLGW sponsors annual Energy Awareness Poster Contest for Memphis and Shelby County K-12 students

Know an artistic child? Each year, MLGW hosts a poster contest to encourage local students to create artwork that expresses the concepts of energy awareness and energy conservation. The poster contest is open to students in grades K-12 residing in Shelby County. The goal is to give students the opportunity to learn and share ideas about saving energy. The poster contest will be judged in three categories: elementary school (grades K-5), middle school (grades 6-8) and high school (grades 9-12). The entries will be judged on their ability to clearly and creatively communicate the theme "saving energy." MLGW will oversee the judging of the artwork.

Each category winner will receive a \$125 award and an energy-saving kit. Each winner's teacher will receive a \$125 gift certificate to the Art Center and an energy-saving kit. All contestants will receive a certificate of participation, and all entries become property of MLGW and may be used for future energy-saving promotional purposes.

Entries must be the original artwork of the student submitting the entry; photographs and computer-generated artwork will not be accepted. Contestants will submit their artwork to the art teacher at their participating school. Home-schooled students will need validation from their parent/instructor.

Interested students should contact their school's art teachers, or their school system's representative: Gregg Coats (Memphis City Schools) at CoatsG@mcsk12.net, Amanda Galbraith (Shelby County Schools) at agalbraith@scsk12.org and Felicia Pete (Home, Parochial, Private, Charter, Montessori and Independent schools) at felicia.peat@cmom.com.

Rules and entry forms can be found at www.mlgw.com/artcontest or call 901-528-4820 ext 3090, weekdays. The deadline for submitting entries is 11/30/2012.

Lighting automation systems planned for MLGW buildings to control operating costs and lower peak demand

Like each of our customers, MLGW faces energy management and operating cost challenges. This article, written by MLGW Energy Use Engineer Marguerite Epps, P.E., C.E.M., CDSM, EPSC, addresses an upcoming lighting automation project.

MLGW is surveying the Netters Business Operations Center as a site for automated lighting. This pilot project will entail the installation of an intelligent central network to schedule lighting in the facility. The 94,000-square-foot office building was acquired in 2002 by MLGW in order to accommodate space and system redundancy needs of some strategic operations.

The building is one of five MLGW sites which participate in TVA's EnerNOC Demand Response (DR) program, which pays incentives for the ability to reduce electric use during TVA-called demand response events. Over time, each DR locations' lighting systems are planned for automation, and addition to the central network.

Lights can be typically left on longer than needed when a facility has variable work schedules and cleaning activities that occur after normal business hours. According to the Department of Energy, lighting accounts for around 39% of electricity used in office buildings. A computer-based lighting management system has its advantages in that lights can be turned off or reduced during work hours when areas are unoccupied, during curtailments, and after work hours based on occupancy and scheduling. However, the system can also be manually overridden to turn on lights as needed.

Other benefits of automation include improved occupant comfort, reduced maintenance, reduced equipment costs and longer equipment life. Typical energy savings for automated lighting systems range from 16% to 80% each year, depending upon the types of cumulative strategies deployed.

The pilot system will work in conjunction with the existing HVAC Building Automation System (BAS).

Various controls will be utilized including daylight, occupancy, bi-level and demand response sensors in order to help reduce the electric usage in the building. Where applicable, wireless and other non-intrusive controls will be installed. This will ensure that the system is cost-effective and transparent to occupants. The pilot is planned for 2014, and will be rolled-out to other non-DR facilities over time. We'll share details as the project progresses so you can learn from MLGW's efforts and determine if similar projects are feasible at your facility.

Methodist LeBonheur Healthcare receives two MLGW/USGBC LEED Incentive Awards for green building initiatives

MLGW and the Memphis chapter of the U.S. Green Building Council (USGBC) recognized Methodist LeBonheur Healthcare for two recent green building projects: FedEx Family House near LeBonheur Hospital and the Women's & Children's Pavilion at the Germantown campus. Both projects achieved Leadership in Energy and Environmental Design (LEED) Gold certification, distinguishing the facilities for their energy and water conservation attributes as well as other sustainability measures that encompass the definition of "green building." The projects earned incentive awards of \$15,000 and \$25,000, respectively, under the MLGW/USGBC LEED Incentive Award.

MLGW provided a \$75,000 grant to the local USGBC chapter in 2008 to encourage adoption of LEED certification for non-residential buildings, as a companion to the utility's EcoBUILD residential green building program. Five projects have received recognition and financial awards from the MLGW/USGBC LEED grant, including iBank (2009), Big River Engineering & Manufacturing (2010) and Court Square Annex 2 (2011). See details at <http://www.mlgw.com/commercial/leedincentive>

MLGW will soon present a resolution to its Board of Commissioners and the Memphis City Council to provide a \$90,000 grant to continue funding the initiative.

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