# Energy Edge

A NEWSLETTER FOR MEMPHIS LIGHT, GAS AND WATER DIVISION GENERAL POWER CUSTOMERS
JUNE 2010

## Test Your Business Energy-Efficiency Smarts!

Smart business means efficient business, and energy is one of the few areas where you can cut costs without sacrificing customer service or product integrity. Test your energy-efficiency knowledge by taking this short quiz, and pick up some smart energy-efficiency tips that can improve your bottom line. (Answers found on page 3.)

1. At what temperatures should you keep your facility?
2. True or false? Surge protectors don't reduce energy use.

## MLGW bond rating upgraded again

Fitch Ratings has upgraded MLGW's electric bond rating for the second time in six months, giving it the highest possible AAA rating. The electric bond rating joins the water bond rating which also sits with an AAA rank.

The new rankings from Fitch propel MLGW to a nearly unprecedented position, and tells potential investors that investing in MLGW bonds is a safe return on their money, which, in turn, allows the utility to help keep rates low for its customers. MLGW is one of a handful of electric utilities to hold an AAA rating from Fitch. The services rates 200 U.S. public power systems.

"MLGW's AAA bond rating in combination with our very low rates, as announced recently in a survey of 50 utilities, places MLGW in a very enviable position. This is very good news for all MLGW customers," said MLGW President and CEO Jerry Collins Jr.

"We have low debt and that is one of the things that helped us. The lower our debt, the more stable the rating companies view us. Especially in times of economic stress, a company that has low debt is in a much stronger position to weather the storm, and the ratings companies closely examine our debt amount," said John McCullough, MLGW's Vice President and Chief Financial Officer.

The high bond ratings recently helped MLGW save $18 million over the next eight years on an electric bond refinancing.

## 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 | $0.026 | na |
| G-7 | ($0.256) | na |
| G-8 / G-9 | ($0.518) | $0.155 |
| G-10 / G-12 | ($0.354) | na |

Monthly adjustment in $/Ccf to published natural gas rates for meters read on or after 6/2/2010.

### Fuel Cost Adjustment (FCA)

| TVA Rate Class | MLGW Rate Code | FCA Amount |
|---|---|---|
| GSA, Part 1 | E-2 | $0.00206 |
| GSA, Part 2 | E-2 | $0.00206 |
| GSA, Part 3 | E-2 | $0.00204 |
| Residential | E-1 | $0.00209 |
| Outdoor Lighting | E-3 | $0.00209 |

**Monthly** adjustment in $/kWh to all firm kWh, beginning with meters read on or after 6/2/2010.

**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

**VIEW YOUR BILL ONLINE AT www.mlgw.com**

# Life-Cycle Cost Analysis facilitates wise financial decision-making

Did you know that many types of equipment found in commercial buildings have lifetime operation costs that are higher than their purchase prices? While you might be tempted to consider only the sticker price when purchasing new equipment or retrofitting your building's shell, you may be able to realize substantial energy and cost savings in the long run if you consider the lifetime utility and maintenance costs of a purchase. This well-established practice is known as *life-cycle cost analysis* and is used by businesses and institutions of all sizes.

Life-cycle cost analysis allows you to compare the lifetime expenses of two or more options for a given building system. These lifetime expenses typically include the cost of owning, operating, maintaining and disposing of the system. Future costs need to be converted (or "discounted") to their present values to account for energy, labor, and parts price escalation (inflation) as well as for the time value of money—the idea that a dollar received today is worth more than a dollar received in the future. The option with the lowest life-cycle cost is the most economical choice.

Consider, for example, the decision of whether or not to install light-emitting diode (LED) exit signs to replace conventional exit signs. Should you make a switch? You can use life-cycle cost analysis to make the optimal financial decision. A life-cycle cost analysis of this question yields the results shown in the table (right).

**Life-Cycle Cost Analysis of conventional versus LED exit signs**

| Overall costs | Cost for 10 conventional exit signs (US$) | Cost for 10 LED exit signs (US$) | Savings by converting to LED exit signs (US$) |
|---|---|---|---|
| **Annual operations** | | | |
| Energy cost | 286 | 40 | 246 |
| Maintenance cost | 227 | 0 | 227 |
| **Total operating cost/savings** | **513** | **40** | **473** |
| **Product lifecycle[a]** | | | |
| Purchase price for 10 units | 0 | 570 | -570 |
| Lifetime energy cost | 2,008 | 278 | 1,730 |
| Lifetime maintenance cost | 1,597 | 0 | 1,597 |
| Disposal cost | 0 | 0 | 0 |
| **Total lifecycle cost/savings** | **3,605** | **848** | **2,757** |

Notes: LED = light-emitting diode; Assumptions: cost of electricity = $0.09/kWh; existing signs have two lamps each, replaced every 6 months at $2.56/lamp; lamp replacement takes 0.25 hours, and maintenance labor costs $25/hour.
a. Lifecycle cost is over 10 years using a 7 percent discount rate.



You'll find that Energy Star's easy-to-use life-cycle cost calculators will produce simple results such as these, and they could help you save thousands of dollars.

Though replacing the conventional signs with LED signs requires a $570 outlay up front, over the course of 10 years this action saves $2,757. If you had not used life-cycle cost analysis and simply looked at up-front costs, you likely would have missed this substantial cost-saving opportunity.

This calculation was done with a simple, free Microsoft Excel–based calculator available from Energy Star. You can access this calculator and many others—including calculators for compact fluorescent lamps, vending machines, computers and water coolers— at www.business.gov/expand/green-business/energy-efficiency/calculate-savings/energy-saving-calculator.html. For larger retrofit projects, request that your contractor complete life-cycle cost analyses of the alternatives. Another option is to use the U.S. Department of Energy (DOE)'s free Building Life-Cycle Cost Program, which can be downloaded from the DOE website: http://www1.eere.energy.gov/femp/information/download_blcc.html The "Investment Analysis" chapter of the Environmental Protection Agency's *Building Upgrade Manual* is another source for guidance: www.energystar.gov/index.cfm?c=business.bus_upgrade_manual .

# TVA Fuel Cost Adjustment trends upward based on weather, demand

The Fuel Cost Adjustment (FCA) returns to a positive amount for the first time since 9/30/2009, when the FCA converted from a quarterly to a monthly format. For meters read on and after 6/2/2010, the impact is an increase of $34 per 10,000 kWh consumed, compared to the previous period's bill, for customers on the E2/GSA part 1 rate. When compared to the same period last year, the impact is a savings of $63 per 10,000 kWh.

Compared to last month's FCA value, June's reflects expectations for higher temperatures and increased volume. The higher temperatures are expected to contribute to increased sales of electricity—which means TVA will need to generate more power from its higher cost resources and buy more power from the market, which will increase the FCA.

The forecasted FCA rates are expected to increase in the near future as the deferred account credit that remained after the transition to a monthly FCA is returned to customers and as total fuel costs increase in the summer peak period. Actual FCA amounts in future months are subject to considerable risks and could vary widely. View historic FCA values at: http://www.mlgw.com/images/TVA_FCA.pdf

**MARK YOUR CALENDAR:**

# Local conference to address emergency preparedness for businesses, organizations

The largest business continuity/disaster recovery conference in the region will be held at the FedEx Institute of Technology on the University of Memphis campus on Thursday, 9/15/2010, beginning at 8:00am. The free, full-day *Emergency Preparedness and Incident Conference* is open to any business, organization or agency. Watch the next issue of ***Energy Edge*** for details—but mark your calendars now!

# MLGW Water Quality Report showcases water purity

MLGW has begun mailing its annual Water Quality Report to residential water customers, culminating a year of laboratory tests that confirm the quality and purity of MLGW's water supply. For an electronic copy of MLGW's Water Quality Report, visit http://mlgw.com/images/water2009.pdf

All community water systems are required to prepare and distribute an annual water quality report, also referred to as the Consumer Confidence Report (CCR), according to a 1996 Congressional amendment to the Safe Drinking Water Act. The Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) prescribe regulations that limit the amount of certain contaminants in water including microbial, inorganic, and organic. Specialists in MLGW's Water Quality Assurance Laboratory perform numerous tests throughout the year to monitor such components of Memphis' water. The 2009 test results reveal our water to be well within the designated limits, and meeting or exceeding all water quality standards set by the EPA and TDEC.

# Test Your Business Energy-Efficiency Smarts!

**1. At what temperatures should you keep your office or store?**

During the cooling season, set it between 75° Fahrenheit (F) and 78°F during occupied hours and between 82°F and 85°F during unoccupied hours. In the heating season, set your programmable thermostat to maintain a temperature between 68°F and 70°F during occupied hours and between 55°F and 60°F during unoccupied hours.

These temperature settings will keep your employees and customers comfortable while improving your bottom line. If your thermostat is located in a spot where it can be easily overridden, consider a lockable cover to prevent people from making unauthorized changes.

**2. True or false? Surge protectors don't reduce energy use.**

*True.* Surge protectors are an effective way of protecting your electronic equipment against voltage spikes, but they do not reduce energy use. Using a power strip to turn off all connected devices will eliminate vampire energy use. Some advanced power strips feature timers that users can program to turn equipment off when not in use. Other models incorporate occupancy sensors or watt meters so that equipment shuts off automatically when no one is present or the system is idle. Learn more about these options at www.mlgw.com/BusinessEnergyAdvisor under "Buying Equipment > Office Equipment >Smart Power Strips.

***Energy Edge*** is published by the Commercial & Industrial Customer Care department of Memphis Light, Gas and Water Division, which serves the needs of MLGW's non-residential customers including businesses, organizations, institutions and government agencies. Comments and distribution list changes may be e-mailed to: CRC@mlgw.org