



Energy Edge

A NEWSLETTER FOR MEMPHIS LIGHT, GAS AND WATER DIVISION GENERAL POWER CUSTOMERS
JULY 2013

TVA's market research partner to survey business customers

TVA and their market research partner, TNS, will begin a mail survey of commercial and industrial customers in late July. Survey results will be used to forecast future energy needs and will play a key role in estimating C&I program potentials and markets.

The survey will be distributed to a randomly selected representative sample of commercial and industrial business owners and facility managers in the Valley and will collect information on commercial building characteristics, equipment inventories, and usage patterns. As a thank you for participating in this study, respondents will be compensated by TNS for completing the survey. Respondents may also elect to donate their gift to charity.

Information collected during the survey will not be released to anyone in a form that could allow the identification of any business, individual or facility. If you receive the survey and have questions, please contact MLGW's Commercial Resource Center.

EnerNOC Demand Response program activates to shave system peak, ensure regional grid stability

Businesses and organizations enrolled in TVA's EnerNOC Demand Response program help lower electricity costs and ensure power stability by agreeing to reduce electricity use during TVA-called peak system events. Two events were called earlier this month, for four hours each on 7/8/2013 and 7/9/2013. Local participants reduced about 30 MW of electric load during each of the events, representing about 10% of MLGW's total system load during those hours.

In exchange for lowering their electricity use and resulting power demand, participants receive financial incentives—both for simply being enrolled in the program and for their performance during TVA-called events. More than \$1.5 million in incentives has been paid to MLGW's participating customers since the program began. More importantly, the program has no penalties for failure to meet demand response objectives during an event.

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	(\$0.014)	na
G-7	(\$0.020)	na
G-8 / G-9	(\$0.032)	\$0.097
G-10 / G-12	\$0.003	na

Monthly adjustment in \$/Ccf to published natural gas rates for meters read on or after 7/2/2013.

Fuel Cost Adjustment (FCA)

TVA Rate Class	MLGW Rate Code	FCA Amount
GSA, Part 1	E-2	\$0.02335
GSA, Part 2	E-2	\$0.02335
GSA, Part 3	E-2	\$0.02307
Residential	E-1	\$0.02360
Outdoor Lighting	E-3	\$0.02364

Monthly adjustment in \$/kWh to all firm kWh, beginning with meters read on or after 7/2/2013.



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

Why does TVA pay local utility customers to use less electricity? A variety of factors—including weather, load, generation, market availability, market prices and transmission—can contribute to TVA’s decision to execute a demand response event. On 7/8/2013 and 7/9/2013, system load was running heavier than expected, less generation was online than planned, market prices were increasing due to high temperatures in the North and there were transmission constraints that limited market purchases. Activating the EnerNOC program was a cost-effective option, benefitting program participants directly and all customers indirectly.

For information on enrolling in the TVA EnerNOC Demand Response program, visit www.mlgw.com/enernoc.

How does MLGW respond during a TVA EnerNOC Demand Response event?

Five MLGW facilities participate in the EnerNOC Demand Response program, including our downtown Administration Building. Our demand response plans primarily focus on lighting and HVAC reductions, since the facilities are mainly office space.

During a demand response event, MLGW uses email, signs and other communications to inform employees and encourage them to make supplemental changes, including:

- *Minimize use of elevators, if physically able.*
- *Turn off all unused and non-essential equipment.*
- *Leave area lighting turned off until the curtailment period ends.*
- *Keep the facilities' doors closed to maintain conditioned spaces.*
- *Adjust window blinds to minimize heat gain.*
- *Use task lighting and personal fans as needed.*

EPA debuts upgraded Energy Star Portfolio Manager website for benchmarking commercial facilities

The U.S. Environmental Protection Agency (EPA) announced the July release of an upgrade to its popular online energy management and tracking tool, Energy Star Portfolio Manager. The new Energy Star Portfolio Manager delivers a more user-friendly interface, enhanced data sharing capabilities, better reporting and, for the first time, the ability to manage buildings across their lifecycle from design through occupancy.

Tens of thousands of U.S. organizations—including school districts, retail chains, hospital systems and local governments—currently use Energy Star Portfolio Manager to measure the energy performance, water use, utility costs and greenhouse gas emissions of more than 40% of the nation’s commercial building space.

“You can’t manage what you don’t measure,” said Janet McCabe, principal deputy assistant administrator for the Office of Air and Radiation. “The new ‘turbo-charged’ Portfolio Manager makes it easier than ever for building owners and managers to make strategic business decisions that are good for the environment and good for the bottom line. This tool helps businesses cut wasted energy, reduce harmful carbon pollution and save money.”

The tool will continue to deliver nearly 150 energy, greenhouse gas (GHG) and water performance metrics that owners and managers of commercial buildings use to make strategic management decisions. One of these metrics, the 1–100 Energy Star

Does your organization use Portfolio Manager?

MLGW is evaluating whether to invest in programming to provide energy consumption data formatted for use in Portfolio Manager. To help in our decision-making, we’d like to know your use or interest in the EPA’s benchmarking tool.

Click on this link to complete our 5-question survey by 8/2/2013.
<https://app.e2ma.net/app2/survey/1364123/213025913/63d0184997/?v=a>

score, rates a building's energy efficiency against similar buildings nationwide. A score of 50 represents median energy performance, whereas a score of 75 signifies that a building outperforms 75% of its peers.

Research confirms there are benefits to simply measuring and tracking a building's energy performance in Portfolio Manager. A recent EPA study showed that buildings that benchmarked consistently over a three-year period logged an average energy use reduction of 2.4% each year. For commercial building portfolios with annual energy bills in the millions of dollars and that emit tens of thousands of metric tons of GHG emissions each year, these reductions can be substantial.

Buildings in the United States that earn an Energy Star score of 75 or higher, and have their data verified by a Professional Engineer or Registered Architect, are eligible to earn EPA's Energy Star certification. Energy Star-certified buildings average 35% less energy use and generate 35% fewer GHG emissions than typical buildings. Studies have shown that they have lower operating costs, increased asset value and higher occupancy rates.

Learn more on EPA's Energy Star commercial and industrial program at <http://www.energystar.gov/buildings> Find more on the benefits of benchmarking in Energy Star Portfolio Manager at <http://www.energystar.gov/datatrends> Share your input on Portfolio Manager by taking MLGW's survey at <https://app.e2ma.net/app2/survey/1364123/213025913/63d0184997/?v=a>

10 Years Later: MLGW Remembers "Hurricane Elvis"

Utility's largest outage in history led to many improvements

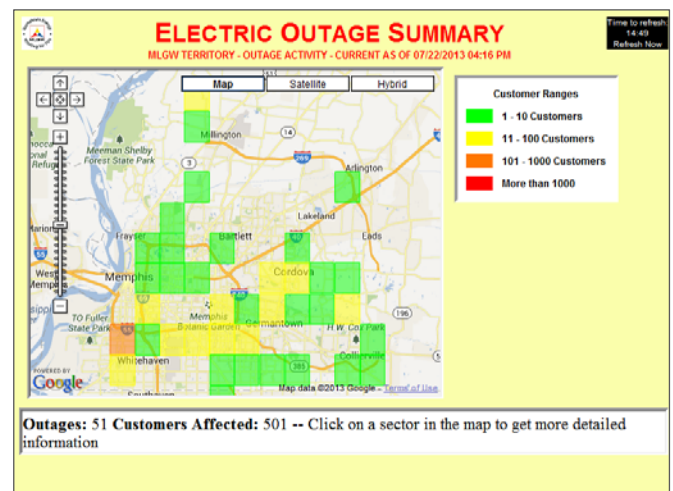
On 7/22/2003, a storm like no other hit Shelby County. Powerful straight-line winds cut a swath of destruction through MLGW's service area, knocking out power to nearly 339,000 customers.

The outages affected more than 80% of MLGW's customer base, ranking as the largest outage event in the utility's history. Over the next two weeks, more than 2,000 utility employees worked around the clock to clear debris, repair damage and rebuild MLGW's electric system. More than 1,300 poles, 2,000 transformers, and 1,000 streetlights were repaired or replaced. More than 5,000 tons of tree debris was removed. MLGW's force of about 1,000 employees was strengthened by another 1,000 outside utility workers and contractors. MLGW's damages totaled in excess of \$30 million. A video highlighting MLGW's response can be found at www.mlgw.com/HurricaneElvis2003. A photo gallery can be found at <http://mlgw.com/hurricaneelvisphotos>

Ten years later, MLGW has implemented a number of improvements that were identified in the wake of the restoration:

Communications

- MLGW now has a real-time outage map at www.mlgw.com that provides the public with a snapshot of affected areas, the number of outages, and estimated time of restoration. The map is frequently shown on TV coverage of outage events.
- Customers can now get outage updates via MLGW's [Twitter](#) and [Facebook](#) sites, as well as its [blog](#).
- MLGW's free [iPhone](#) and [Android](#) applications allow a customer to obtain an outage status at his or her address.
- MLGW has the ability to utilize an automated call system to notify customers in affected areas of expected restoration times.



Operations

- In 2007, MLGW opened its Bob Gary Emergency Operations Center at its Netters Business Center location on Whitten Road. It provides a central location for MLGW's response team to coordinate restoration during an emergency.
- Created a Crisis Management Coordinator position to provide a key point of contact to manage the emergency response process internally and with other agencies.
- Tripled the phone capacity of its Customer Care Center.
- Expanded mutual agreements with outside contractors and utilities to increase the number and availability of external resources.
- Improved collaboration with the Federal Emergency Management Agency (FEMA) and other government entities.

Reliability

- Strengthened the electric systems that feed critical care facilities such as Methodist South Hospital, Methodist North Hospital, MLGW's Sheahan Water Pumping Station and the city's wastewater treatment plants.
- Increased backup generation and circuit feeds at various pumping stations.
- Installed automated switches in key areas that allow power to be automatically redirected to minimize an outage's impact.
- Smart meters would allow MLGW to automatically detect outages, speed up the restoration process and confirm power restoration before crews leave an area.

Underground Vs. Overhead

Following severe weather, MLGW sometimes receives inquiries about the possibility of putting all of its services underground. Here are some facts about overhead vs. underground:

- MLGW has about 40% of its electric lines underground. According to the Edison Electric Institute, this is about twice the national average.
- All new construction is required to have underground service, but it is not feasible from a financial or logistical standpoint to convert all of MLGW overhead lines to underground.
- In the last 30 years, MLGW has experienced \$100 million in storm damages. Comparatively, it would cost at least \$3-5 billion to place all lines underground. This would also result in the relocation of water, sewer and gas lines for many neighborhoods.
- In addition, all underground lines are fed by above-ground substations and transmission lines.
- While underground lines are less susceptible to storm-related outages, the average underground outage is longer in duration because crews must dig to locate the issue. Underground cable also must be replaced more frequently.

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