



Energy Edge

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

APRIL 2007

Daylight Saving Time period lengthened

An often overlooked aspect of the Energy Policy Act (EPACT) of 2005 is the extension of Daylight Saving Time. EPACT language moves the start date forward, to March 11, and extends the end date to November 4. The result is four more weeks of longer days and, more importantly, the need to change all time-based systems within your organization.

The change is meant to save energy by providing more daylight during the evening, although some predict the savings may be offset by increased energy use in the morning. The Department of Energy is tasked with studying the energy savings of the change and reporting back to Congress by December, and Congress has reserved the right to switch back to the old system. For a history of Daylight Saving Time, visit the U.S. Naval Observatory website: http://aa.usno.navy.mil/faq/docs/daylight_time.html

Frigid winter temperatures trailing unusually warm weather cause dramatic increase in heating costs

The winter of 2006-2007 will be remembered as a season of contrasts. Global temperatures for December 2006 through February 2007 were the warmest on record, according to the National Oceanic and Atmospheric Administration (NOAA). Yet the agency identified a streak of frigid temperatures in parts of the United States that helped keep the U.S. average within normal range. According to NOAA, December 2006 was the nation's 11th warmest December on record, while February 2007 was among the top third coldest Februaries in 113 years of record keeping.

Locally, while December and early January were above average in temperatures, late January and February brought abnormally low temperatures to our area. The impact on utility bills was confusing to many—low energy bills followed by what appeared to be usually high bills. The key to understanding seasonal energy consumption, however, is to analyze based on weather severity since seasonal usage is typically driven by space heating.

Purchased Gas Adjustment (PGA)

MLGW Rate	Consumption	Demand
G-1 residential	\$0.4179	na
G-7	\$0.3932	na
G-8 / G-9	\$0.4199	(\$0.0610)
G-10 / G-12	\$0.4201	na

Adjustment in \$/Ccf to published natural gas rates for bills rendered on or after 3/27/07.

Fuel Cost Adjustment (FCA)

TVA Rate Class	MLGW Rate Code	FCA Amount
GSA, Part 1	E-2	\$0.00088
GSA, Part 2	E-2	\$0.00088
GSA, Part 3	E-2	\$0.00088
GSB, Firm	E-2	\$0.00088
GSC, Firm	E-2	\$0.00088
GSD, Firm	E-2	\$0.00088
MSB, Firm	E-2	\$0.00088
MSC, Firm	E-2	\$0.00088
MSD, Firm	E-2	\$0.00088
Residential	E-1	\$0.00089
Outdoor Lighting	E-3	\$0.00089

Adjustment in \$/kWh to all firm kWh, beginning with bills rendered on 3/27/07 and lasting for three consecutive billing periods. See current electric rate tariffs at www.mlgw.com for description of electric load specifications per TVA Rate Class.



Important Contact Information

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Outage: 901-544-6500

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While average temperatures provide some insight into energy consumption, degree days are the standard measurement used by energy managers. Degree days measure the need for space heating or cooling, based on average daily temperatures. Degree days are calculated by averaging the daily high and low temperatures officially recorded in Memphis, then subtracting the average from 65°, the temperature at which neither heating nor cooling is typically needed. The result is the number of degree days for that period—either heating degree days (HDD) or cooling degree days (CDD).

Because MLGW uses 21 billing cycles to spread meter reading activities for approximately 1.2 million meters throughout the month, your meter is most likely not read on the first day of each month—so your degree days analysis must follow the billing cycle period rather than the calendar month for greatest accuracy.

Calculate Heating Degree Days

On February 15, for example, the high in Memphis was 31°; the low was 21°. HDD for that day is calculated as:

$$31^{\circ} + 21^{\circ} = 52^{\circ}$$

$$52^{\circ} / 2 = 26^{\circ}$$

$$65^{\circ} - 26^{\circ} = 39 \text{ HDD}$$

Memphis Heating Degree Day Comparison

	<u>Month</u>	<u>versus Normal*</u>	<u>Cycle 1**</u>
Dec 2006	539	-120 (18% fewer)	564
Jan 2007	683	-87 (12% fewer)	557
Feb 2007	621	+56 (10% more)	762

* Column represents departure from normal, based on NOAA data.

** Cycle 1 periods defined as December (11/22-12/27), January (12/27-1/26) and February (1/26-2/26.)

You can obtain HDD and CDD data, as well as other local climate information, through the National Weather Service's website at: <http://www.srh.noaa.gov/meg/climate.php> See the news report at <http://www.noaanews.noaa.gov/stories2007/s2819.htm>.

Inquiry into MLGW cash reserves confirms appropriate level

Recent interest in MLGW's level of cash reserves questioned the amount of cash available and whether it was excessive. Just as your business cannot operate with zero funds, MLGW must maintain a sufficient level of reserves to cover the obligations of its operations. Consider these facts:

- MLGW's annual budget is in excess of \$1.5 billion.
- TVA power expenses, which reflect local electricity sales, were nearly \$850 million in 2006, a monthly average of \$70 million.
- Natural gas expenses in 2006 totaled nearly \$330 million.
- Utilities must keep reserves in case of disasters and unforeseen events, such as the windstorm of July 2003.
- Utility companies typically maintain minimum cash balances equal to 30 to 60 days of operating expenses.
- MLGW's 2006 unaudited financial statements show a balance of approximately \$145 million—equal to 35 days of operating expenses.
- MLGW's cash on hand is comparable to utilities in Nashville, Chattanooga and Knoxville.

While \$145,000,000 contains an impressive number of zeroes, it is a reasonable, industry-appropriate level of cash reserves for an operation of this magnitude.

Energy Edge is published by the Economic Development department of Memphis Light, Gas and Water Division. Comments and distribution list changes may be e-mailed to: crc@mlgw.org