# Environmental Commission Meeting

Thursday, June 6, 2013 – 6:00 p.m.
Public Services Building
7700 Southern Avenue

MINUTES

| Present | | Staff |
|---|---|---|
| Chairman Joe Skelley | Paul Mosteller | Bo Mills |
| Clyde Davidson | David Thorpe | Leslie Throneberry |
| Andy Foster | Anne Wesberry | |
| Linda Kaplan | Alderman John Drinnon | |
| Laura Meanwell | | |

Guest: Susan Threlkeld

Absent: Jimmy Davis, Urania Erskine, Steve Fleischmann

CALL TO ORDER:
Chairman Skelley called the meeting to order at 6:08 p.m.

ESTABLISHMENT OF QUORUM:
A quorum for the Environmental Commission meeting was established.

INTRODUCTION OF GUESTS:
Former Environmental Commission member, Susan Threlkeld, attended the meeting.

MINUTES APPROVAL:
The minutes of the May meeting were approved.

STAFF REPORTS:
Bo Mills: Mr. Mills reported that the BMA will have a second reading of the FY14 Proposed Budget on Monday night. There is a proposed tax increase of $0.445.

Mr. Mills also reported that the water usage is still low due to the mild temperatures and recent rains.

Approximately 60% of the back flow testing reports for irrigation systems have been returned. Reminders have been in the *Talk of the Town* (*TOTT*) and on the water bills.

With the two very intense rain storms recently, we have had some flooding. These areas have been checked and there are no blockages. The flooding is from the volume being more than our system could hold.

COMMITTEE REPORTS:
Clyde Davidson: Mr. Davidson had nothing to report.

Linda Kaplan: Mrs. Kaplan brought in a box of facial tissue that is made from sugarcane husk and bamboo. There is no paper or chlorine used in this product. This is a great alternative to paper-based tissue.

Anne Wesberry: Mrs. Wesberry had nothing to report.

Paul Mosteller: Mr. Mosteller asked about putting a reminder in the *TOTT* about sprinkler/irrigation system run-off. We need to bring awareness to the citizens on the amount of water that is being wasted by running sprinklers and irrigation systems for too long or during times that it is raining.

Mr. Mosteller also mentioned the wasted irrigation in the City medians. Mr. Mills reported that on the new Wolf River Blvd extension project, the City has installed a drip irrigation system and native plants so this will reduce the amount of water required.

David Thorpe: Mr. Thorpe discussed TVA's solar power program. TVA sells power for $.09 per kilowatt but buys it for $.21 ($0.09 plus premium of $0.12) per kilowatt. The amount that was budgeted for this program was reached early in the year. TVA agreed to continue to buy the power but not pay the additional premium. Solar power is expensive to generate. Green Power Switch Program is a way to offset that cost. This is a voluntary program that customers pay more to support.

Laura Meanwell: Mrs. Meanwell received the recycling video "The Rotten Truth". She plans to schedule presentations at the elementary schools once school starts back.

Alderman John Drinnon: Alderman Drinnon mentioned the budget cuts for the arts. New schools and ambulance changes are coming and are a priority over the art programs.

SMART METER EVALUATION:

The Mayor would like the Environmental Commission to submit its position on Smart Meters. Mrs. Kaplan already has a smart meter. She is happy with their meter. It has made her more aware of the costs during peak usage times. Mr. Foster's only concern was whether the meter would be paneled properly to prevent fires. After watching the news report from WREG.com and discussing the information handed out at the meeting (see attached), it was unanimously decided that the Commission would convey their support of the smart meter program to the Mayor and the Board.

Old Business: N/A

New Business: We were reminded that the July meeting has been cancelled. The next meeting is on August 1, 2013.

ADJOURNMENT:

There being no further business, the meeting was adjourned at 7:20 p.m.

# Come To The Smart Meter Town Hall!

Where: Benjamin Hooks Public Library (map)
3030 Poplar Avenue
Memphis, TN 38111

When: 6:00 PM

"My name is Joe Saino. My brother and I ran a manufacturing business here for over 40 years. I am a graduate electrical engineer and I was on the board of the MLGW for 6 years. I respect President Jerry Collins and Chris Bieber and the employees of the MLGW. They do a good job of delivering electricity, gas and water.

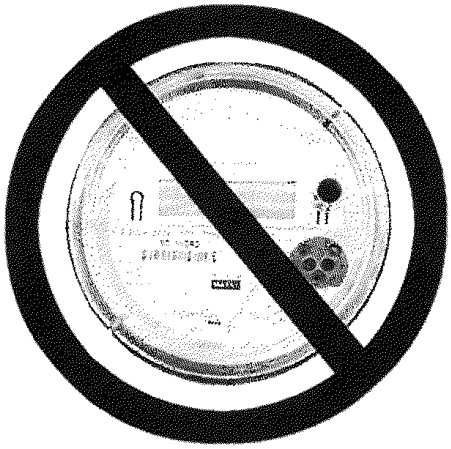
However they are a pawn in a bigger game and the name of that game is CONTROL. It is control of your lives through the control of your utilities and this is what has to be stopped.

MLGW will not have ultimate control of your use of electricity, gas and water. Those decisions will come from the Washington DC controllers through the US Department of Energy and a smart meter is the first step. Regardless of what the MLGW promises, and I know they are sincere in their statements, they will not be in control. THE Washington DC bureaucrats will be in control in the name of Global Warming.

***However a very strong argument can be made for not spending $215 million +++ on a technology that has very little to offer in the way of something good for you the MLGW ratepayer***. In a city that is virtually broke, why burden the rate payers who are also taxpayers with this financial burden. All they can promise you is a punitive time of day rate schedule that will only benefit you when you wash your clothes at 3 AM and take you bath at the same time.

The question is not do your trust the MLGW? The real question is do you trust the Federal Government, the department of energy, the IRS, the EPA and the Congress? Recent scandals answer that question. I trust my neighbors and my fellow taxpayers and ratepayers. I trust my neighbors, my fellow taxpayers and ratepayers. Let us reject this proposal and closely watch and vigorously wage the battle for our precious freedoms."

# Refuse Smart Meters



**HIGHER BILL$**
**PRIVACY ISSUES**
**FIRES!**

## What is a "Smart" Meter?

**MLGW is now replacing existing analog meters on homes, apartments and businesses, with new wireless digital electric, gas and water meters.**

Unlike present analog (electro-mechanical) meters, a "smart" meter is a surveillance device that monitors your "energy consumption behavior" by reporting how much and by what means your utilities are used!

It emits intrusive "pulsed" microwave radiation every few seconds into your home and neighborhood. It may harm wildlife, catch fire, and disable computers and appliances.

Other areas of the USA have had major privacy, cost, and safety issues with these meters.

**Request a "Refuse Smart Meters opt-out letter" to MLGW**
MemphisSmartMeters@gmail.com

Questions? Phone Mary Hill 901-634-7494

For more information:
www.stopsmartmeters.org/ FAQ
www.refusesmartmeters.com

# Councilmembers Voice Concerns Over Smart Meters (from wreg.com)

Posted on: 11:39 am, March 6, 2013, by Candace McCowan, *updated on: 06:23pm, March 6, 2013*

(Memphis) Memphis City Council members and a local union representative are raising concerns about smart meters being installed by MLGW.

MLGW began a pilot program in 2010 but will now install an additional 60,000 smart meters.

Smart Meters eliminate the need for a meter reader by wirelessly transmitting electrical use to the utility company.

"We are hearing a lot of concerns about fires about the equipment and of course MLGW believes these systems are safe. They believe we need them and they present a cost savings. But in other parts of the country we are hearing stories that contradict that," said Councilwoman Wanda Halbert.

"Smart meters absolutely do not cause fires, period. All the meters plug into a socket. If that socket has a problem then it can overheat," said MLGW CEO Jerry Collins. Collins said the company will also repair or replace the utility boxes behind the meter if it is needed.

"There was a box of these burned up meters, they are coming in every week. There's about a 30% failure rate," said Local Union 1288 representative Bill Hawkins.

Hawkins claimed to have pictures of local smart meters that have burned. MLGW representative Richard Thompson said they've not had any smart meter fires since they began using them in 2010.

However across the country smart meter fires have been reported.

In California there were smart meters overcharging customers.

Some people have concerns that the radio frequency from the meters might cause cancer, but the American Cancer Society said the risk is extremely low.

Halbert said she and other council members wanted to express their concerns in hope that MLGW addressed them, "We want to make sure the citizens of Memphis can trust out utility company."

**Smart Meter Radio Frequency Position Statement (from MLGW.com)**

Memphis Light, Gas and Water strives to provide customers with dependable, low-cost, environmentally conscious service. In keeping with this environmental stewardship, MLGW has begun pilot projects related to Smart Grid technologies, including the installation of 1,200 electric smart meters at the homes of volunteers within Shelby County.

Smart meters replace the electro-mechanical meter that utilities have used for decades and which manufacturers no longer produce. All smart meters are digital, but not all digital meters include the built-in communications capability to make them "smart." Smart meters are designed to help modernize the electricity grid - resulting in lower costs and higher billing accuracy, as well as potentially helping customers become better informed about their electricity use. Smart meters also have features to automatically notify the utility when power is lost and again when power is restored, helping expedite power restoration. (With traditional meters, MLGW doesn't know an individual's power is out until someone calls to report it.)

More than 20 million smart meters have been installed in the U.S., with 65 million installations - or half of all U.S. homes - expected by 2015. While smart meters are new to Shelby County, they are prevalent elsewhere in Tennessee and across the nation, including several utilities in the Northeast have used smart meters for more than a decade.

Nationally, some small segments of the population have expressed concern about the radio-frequency (RF) fields used by smart meters for communications - but these concerns are not well founded. The RF exposures from smart meters are much lower than from many other common household devices, such as cordless telephones. The smart meters being installed by MLGW comply fully with the RF safety standards adopted by the U.S. government for wireless communication devices. Recent evaluations of the scientific research on RF fields by U.S regulators and international public health agencies such as the World Health Organization have not found a causal link between RF fields and adverse health effects.

As MLGW studies the operational and customer benefits of smart meters through pilot programs, we continue to monitor industry trends and scientific research to ensure our services remain dependable, low-cost and environmentally conscious.

MLGW
Smart Grid

## MLGW Smart Meter Installation Overview

- Smart meters are an evolution of metering technology. Dial-faced analog meters are no longer manufactured, replaced by digital meters with a digital read-out. Smart meters are digital meters with built-in communications which allow consumption data to be sent through secure channels to MLGW daily, rather than having an MLGW Meter Reader visit the property each month for a manual reading. All meters—whether analog, digital or smart—measure consumption.
- There are more than 37 million smart meters installed in the United States.
- MLGW's 2013 operating budget includes funds to install a combined 60,000 residential electric, gas and water smart meters, which represents about 6% of MLGW's one-million-plus utility meters.
- MLGW has been researching advanced meter technology for more than 10 years to determine applicability to MLGW operations and benefits to customers. MLGW plans to have full smart meter deployment by 2020. Many smaller communities in our region are already reaping the benefits of full deployment.
- MLGW conducted a three-year 1,000-meter Smart Grid Demonstration project to evaluate the operational and consumer benefits of smart meter technology. The pilot project ended 12/31/2012, with the following results:
    - Smart meters work, with MLGW receiving 100% of nightly billing reads by 7:00am.
    - Smart meters deliver high customer satisfaction, with 95% saying they would recommend the smart meter experience to a friend.
    - Smart meters increase customer awareness, with 95% saying they are more aware of when their home uses electricity. 70% say others in the household also are more aware.
    - Smart meters increase energy conservation, with 77% saying they made at least one change as a result of participation.
    - Smart meters enable new opportunities, with 12% of participants adopting the optional pilot Time-of-Use (TOU) rate. TOU participants used an average 5.6% less electricity during the pilot, compared to smart meter customers who remained on the standard electric rate and reduced electricity use an average 2.3%
    - Smart meters create jobs, with customer utility bill savings turned into increased discretionary spending in the community, which results in higher employment. Projections based on demonstration results show potential energy conservation savings up to $29.8 million, which equals 456 new jobs.
- Smart meters give customers more timely access to their consumption data, enabling customers to track their usage and make changes to lower utility costs before receiving their bill. Smart meters enable customers to see bill-to-date calculations throughout the month, as well as request weekly bill-to-date emails and set consumption thresholds for usage alerts. Prepay service, a pay-as-you-go option, provides savings for customers through eliminated deposits, late fees and reconnection fees.
- Electric smart meters provide alerts to notify MLGW automatically of a power outage and also enable MLGW to confirm restoration before crews leave an area. Water smart meters provide leak detection to alert MLGW and customers of leaks before they may be visible, enabling quicker repair and preserving water supplies.
- Smart meters enable MLGW to achieve operational savings
    - Labor—net reduction of 150-200 positions through attrition (no layoffs)

    - Transportation—vehicles, fuel and emissions associated with position cuts
    - Outage management—automatic outage alerts eliminate the need for customers to call MLGW to report an outage, providing more timely information to MLGW for faster response and reducing or eliminating the contract for MLGW's outsourced outage hotline service
    - Billing—accurate readings that eliminate estimates and manual errors, which trigger customer calls and requests for re-reads and corrected bills
- Full-scale smart meter deployment cost is approximately $215 million and will be funded through MLGW's operating budget, not special fees. Operational and customer savings from smart meters range from a conservative $22 million to $70 million annually. The conservative simple payback range is between 9 and 11 years; actual payback could be as little as 3 years.
- Smart meter opponents cite claims on the Internet that are designed to cause undue alarm and hysteria. The union representing MLGW bargaining unit employees has been a vocal opponent, as most of the positions that would be eliminated are union jobs. MLGW has addressed these concerns through numerous channels. (See Myths & Realities and Smart Talk links at www.mlgw.com/smartgrid )
- Customers who oppose smart meters may opt-out and decline installation. Approximately 24,000 customers will be included in the 60,000-meter deployment. MLGW will send letters in the coming weeks, followed by additional contact prior to meter installation and detailed communications as features are implemented.
- Time-of-Use rates are completely voluntary. TOU offers incentives for customers to consider and adjust electricity use during on-peak hours, when electric demand and generation costs are highest. Under the rate, 13% of hours in the year are on-peak with higher costs, while 87% of hours are off-peak with lower costs.
- As MLGW finalizes plans and prepares for installation, MLGW will meet with each suburban Mayor to discuss specifics in their community. (See 2/11/2013 letter from MLGW President Jerry Collins.)
- Find details, customer testimonials, presentations and other facts at www.mlgw.com/smartgrid

# Smart Grid / Myths and Realities Q & A



Although smart meters provide many benefits to both utilities and their customers, some utilities have experienced opposition from citizens. MLGW has tracked issues and provided insight regarding current and future use of smart meters in Shelby County. The myths and realities below may help address questions you may have about this new technology and its benefits, uses and limitations.

**Data Privacy**

Myth: Smart meters tell MLGW what equipment is operating in my home and even where people are located inside the house.

- **Reality**: Like your existing electric meter, a smart meter is a measurement device. A smart meter measures how much electricity has been used in a certain time period, then sends that information to MLGW nightly. That's it. The meter does not know what equipment, appliances or electronics may have used the power—only how much was used and during what period. Customers can look at their smart meter data online and, by recalling household activities, they can determine when specific equipment or appliances operated to see the impact on electricity use. Contrary to myths on the Internet designed to raise fears, a smart meter cannot locate which room you are in, identify medical conditions, determine your personal activities or know when your toaster is operating.

Myth: MLGW may share my smart meter data with others without my knowledge or consent.

- **Reality**: Senate Bill 3608 amended the Tennessee Opens Record Act, effective 7/1/2012, to exclude "consumer specific energy usage data except for the aggregate monthly billing information" from the list of information that can be disclosed. This gives your smart meter data the same "private records" protection as your social security number and financial information. It means MLGW must reject requests from third-parties for your smart meter's interval data. (Interval data shows how much electricity was used during any 15-minute, hourly, daily or weekly time period.) MLGW will make your smart meter data available only to vendors we have contracted with to provide customer services, such as meter data analysis tools that present your data when you login to My Account. If you want to share your home's smart meter information with someone else, you can use the Green Button link in My Account to download it as an XML datafile and send it to whomever you wish.

**Data Security**

Myth: Hackers can obtain my meter data and use it for criminal purposes.

- **Reality**: Smart meters are secure. The advanced meter uses a cellular signal to transmit usage information wirelessly to MLGW. Meter manufacturers and cellular providers use proprietary meter and transmission protocols to defend against the unauthorized access of the customer's utility usage information. Encryption is used at each step of the data transmission process: at the meter, during transit from the meter to cellular carrier and then again at MLGW. This is much like sending a secure text message once a day from your cell phone through your cellular provider. Your meter-specific encrypted data is received through secure gateways at MLGW where it is then matched with your customer profile. It is virtually impossible to associate transmitted data to an individual customer prior to matching the data in our secure Customer Information System. Only after this data matching process is completed is the information provided to the customer and used for billing and analysis.

- **Reality**: Even if someone was able to hack into MLGW's system to obtain your specific smart meter data, it doesn't make your home any more vulnerable to crime than when a thief parks down the street to watch you pull out of your driveway, or when a stranger knocks at the door without anyone answering, or when you activate the GPS locator features in your smart phone, or when you post vacation plans on social media.

**Meter Tampering**

Myth: Smart meters can be altered to change my meter reading.

- **Reality**: Utility theft, which MLGW calls "diversion," has been happening for decades all over the world—no matter what type of meter was in place. (In 2011, MLGW confirmed more than 11,000 instances of utility diversion yielding more than $3 million in recovered revenue.) Smart meters enable utilities to reduce the size and scope of utility theft through a combination of system alerts and daily readings which would reveal evidence of tampering more quickly. Attempts to alter the usage recorded would be discovered during MLGW's billing data review process, triggering manual analysis and verification, which could include any combination of re-reading the meter, comparing to historic use, estimating consumption to produce a bill and investigating for utility theft.

**Meter Accuracy**

Myth: Smart meters are less accurate than old dial-faced meters.

- **Reality**: Smart meters are manufactured to American National Standards Institute (ANSI) standards controlling accuracy. In addition, manufacturers and MLGW test samples of meters to measure and verify performance under operational conditions. Dial-faced meters known as "electro-mechanical" or "analog" are far more likely to be inaccurate, as they slow down over their lifetime, much like an old clock loses time. Drastic change in consumption after a smart meter installation typically is tied to changes in weather, which trigger the need for more heating or cooling.

**Meter Safety**

Myth: Smart meters cause health problems due to wireless communication signals.

- **Reality**: Like millions of common devices in today's technology-driven world-including cell phones, cordless telephones, microwave ovens, garage door openers, wireless routers and baby monitors-smart meters use radio frequency (RF) signals to communicate. Smart meters operate below the RF emission standards established by the Federal Communications Commission (FCC) for wireless communications devices. Radio frequency emissions weaken significantly as the distance between you and the device increases. RF energy also is decreased by your home's exterior wall construction and the casing of a smart meter. In addition, RF exposure is limited to the times when a smart meter actually communicates data--which, for MLGW customers, is typically less than two minutes per day. Continuously standing in front of a smart meter would result in the highest exposure a person could experience, and even then the exposure would be approximately 70 times less than the FCC limits.

  Read MLGW's RF Position Statement and view comparisons of RF power density levels of smart meters and other common household devices.

Myth: Smart meters cause fires

- **Reality**: Smart meters themselves do not cause fires, but there have been a very small number of reports in other cities about fires occurring in homes that had smart meters. It's important to note that these fires could have occurred with any type meter, as investigations determined the meter was not the source of the fire.

  An electric meter is attached to a meter socket, which moves electric current from the grid into the home through the electrical panel. When the meter socket gets damaged (due to loose connections, current overload, tampering, age or other factors), the equipment can overheat and the electric current can arc, causing a fire, regardless of the type of electric meter installed. MLGW's Electric Engineering Manual provides instructions for verifying the condition of the meter socket when performing meter work at a customer location. When unsafe conditions are found, the customer is notified of the need to hire an electrician to make repairs before MLGW will restore electric service, since maintenance of

customer's responsibility.

Read the update presented to the Memphis City Council's MLGW committee.

**Loss of Customer Control**

Myth: MLGW will use the smart meter to control how much electricity I use and to turn off power if they think I'm using too much.

- **Reality**: MLGW does not monitor smart meter data in real-time (remember, we collect data nightly), nor do we allocate how much electricity an individual household needs. Smart meters actually give customers greater control, as you can learn about your electricity use and make changes to avoid high bills. Many customers participating in MLGW's Smart Grid Demonstration liked the ability to go online and see their daily electricity use so they could keep track rather than only seeing the total on the MLGW bill.

**Meter Types**

Myth: Any meter without dials on the face is a smart meter.

- **Reality**: Meter manufacturers no longer produce the dial-faced analog meters that have been used for more than a century by the electric industry to record usage. Instead, manufacturers have all switched to producing meters that have a digital face so that's the only option for MLGW and other utilities buying new meters. On the outside, smart meters and digital meters look the same, with an easy-to-read digital display, but smart meters also have built-in communications and programming to gather and send meter information remotely. While all smart meters are digital meters, it's important to realize that not all digital meters are smart meters.

**Cost of Electricity**

Myth: MLGW will use smart meters to raise my rates and charge me more for electricity.

- **Reality**: Smart meters enable MLGW to offer new rate options, including Time-of-Use (TOU) rates that enable customers to pay less for electricity use during periods of low demand (like weekends) and more for use during periods of high demand (like Summer weekday afternoons). The TOU rate provides motivation for customers to pay attention to when they use electricity and to determine if certain activities could be delayed until lower-cost hours. The TOU rate pilot is voluntary and includes many tips for participants to maximize saving opportunities. As a result, TOU pilot participants in the Smart Grid Demo delayed some activities until off-peak hours, used an average 5.6% less electricity overall and saved money—all while helping reduce stress on the electric grid during peak periods.

**Jobs in the Community**

Myth: Smart meters eliminate jobs.

- **Reality**: Smart meters installed at every customer location would eliminate the need for traditional Meter Readers who drive and walk across Shelby County manually recording about one million meter readings each month--but some new utility jobs will be created to manage the new technology and its expanded processes.

  MLGW has an average turnover rate of 30% among its 90-some Meter Readers each year as these employees take other jobs within the utility or leave the company. That means a Meter Reader working today is unlikely to still be a Meter Reader four years from now, whether or not smart meters are installed.

  As customers use the information from smart meters to make changes in their electricity usage, they save money on utility costs. Those savings become disposable income that buys other goods and services in the community, creating new jobs. Younger Associates, a Jackson, TN-based economic development firm, estimates that 152 new jobs are created for every $10 million in utility bill savings. Based on results of the Smart Grid Demo, MLGW's residential customers have potential savings of up to $29.8 million annually, which equals 458 new jobs.

**See what others are saying about smart meters**:

- PBS News Hour, How Smart are Smart Meters?
- PBS News Hour transcript
- Smart Grid Consumer Collaborative, Separating the Facts from the Fiction about Smart Meter
- View Videos of Our Local Smart Meter Customers