

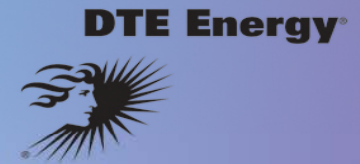
DTE Energy[®]



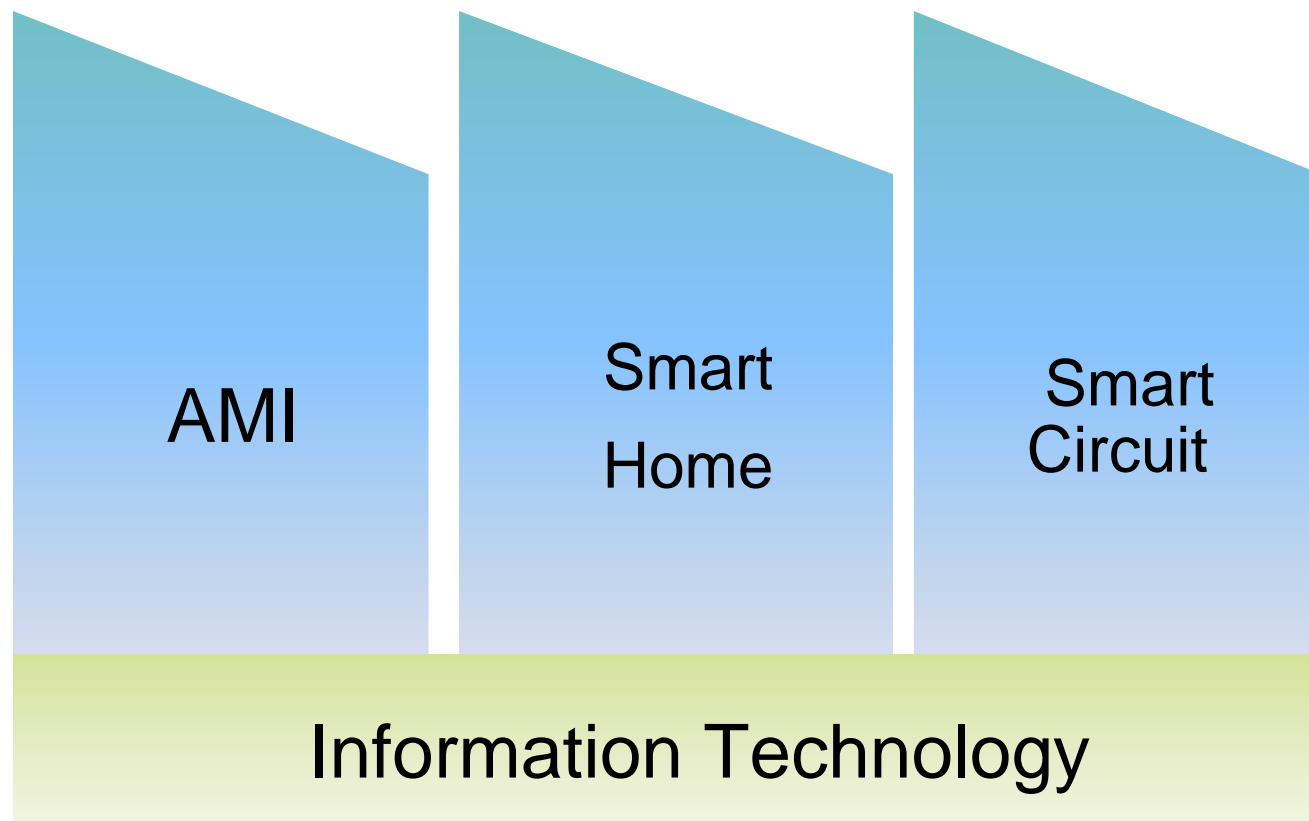
**Advanced Metering
Infrastructure (AMI)**

December 1, 2011

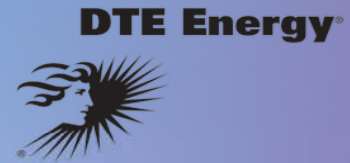
**DTE Energy received a DOE grant to
implement SmartCurrents**



SmartCurrents



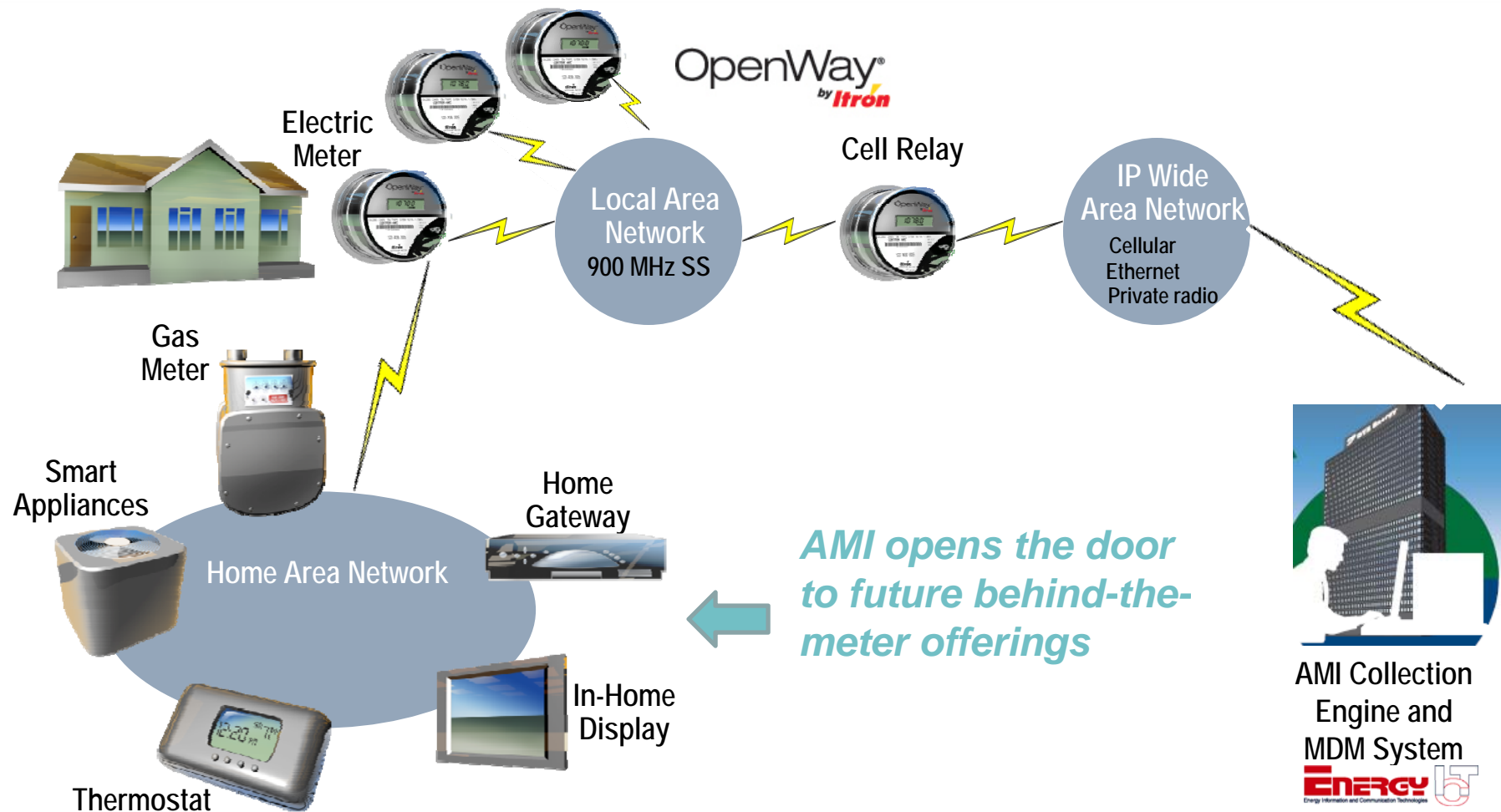
What is Advanced Metering Infrastructure? (AMI)



- The AMI project is DTE Energy's plan to upgrade or replace natural gas and electrical meters throughout our service territory. The project includes
 - Replacing 2.6 million electric meters
 - Modifying 1.3 million natural gas meters with a remote-reading module
 - Full conversion will occur in phases over multiple years dependent on annual capital fund allocations



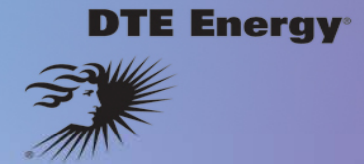
How does AMI work?



Illustrations courtesy of Itron Inc.

AMI Communications will be ongoing

AMI is committed to communicating with all aspects of the communities, especially noting that some access issues are complex....



Communication Plans

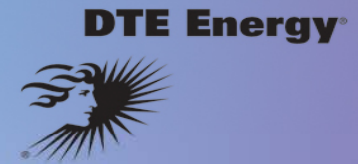
- Meet with City Officials
- Participate in Township meetings
- Local Media Releases
- Direct Mail customer letters and brochures
- Conduct employee residence meeting
- Distribute door hangers on installation
- Provide Frequently Asked Question document
- Smart Currents youtube
www.youtube.com/user/DTEEnergyCompany#p/u/11/vtzH1TPEmXE
- Installation DVD available on request
- Regularly update DTE Energy website (www.dteenergy.com)

Meter Access

- With over 20% of our meters inside of homes, access often becomes an issue to the installation
- A meter accessible for meter reading must also be accessible for installation and repair regardless of AMI



AMI increases actual reads and accessibility of meter reading

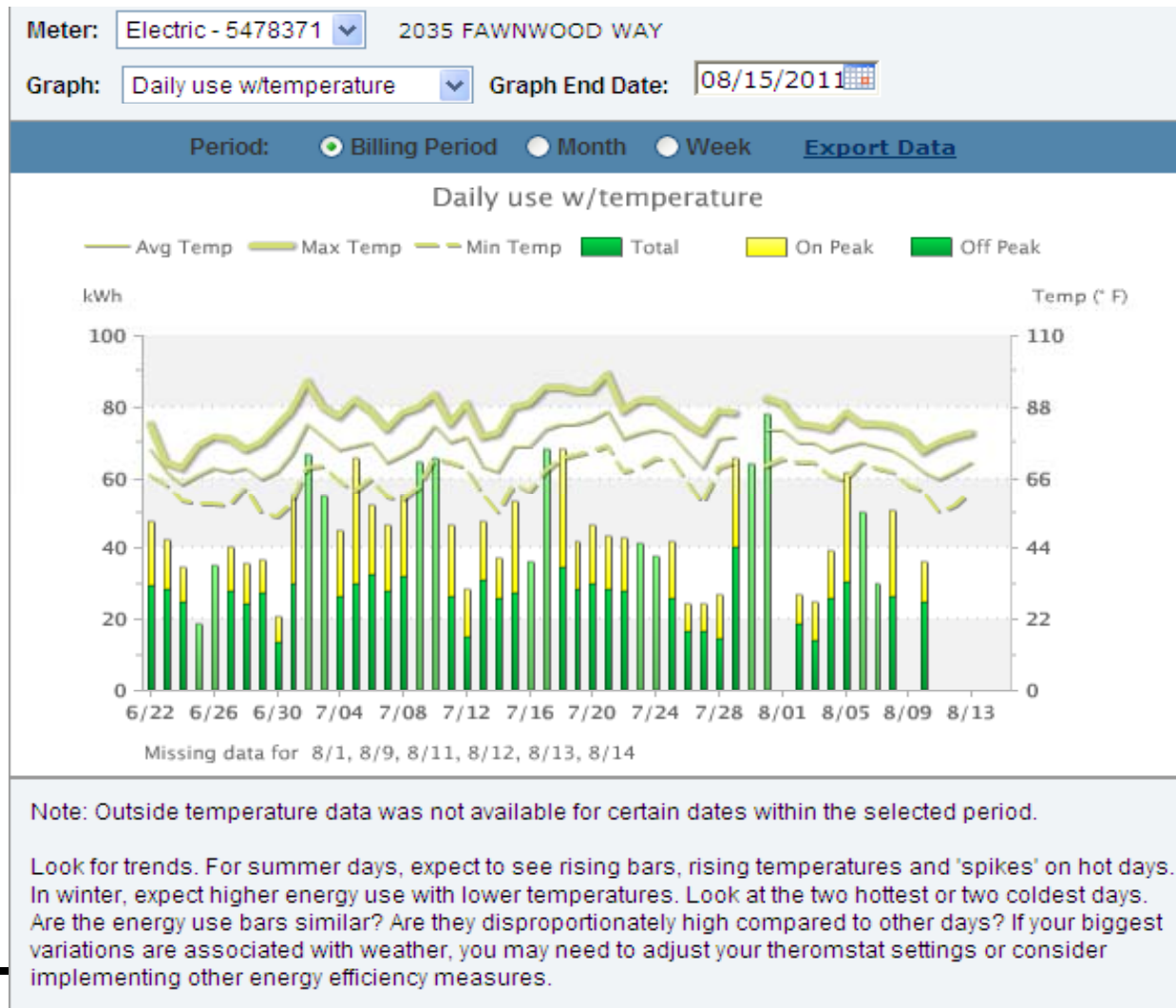
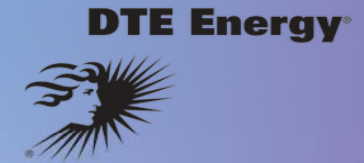


- Eliminates
 - Manual meter reading
 - Estimated reads
 - Customer special reads
 - The need for physical site access
- Improves billing accuracy
- Provides the customer with online access to their energy usage
- Better communication with accurate, timely data
- Remote Turn On/ Turn off and Reconnect / disconnect capabilities
- New products and rate options available
 - Peak pricing rates
 - Billing cycle options
 - Rate Analysis

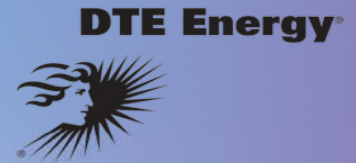


AMI Performance and Benefits

Data Presentment allows customers to review their own daily and hourly usage data online



AMI improves the quality and reliability of energy delivery

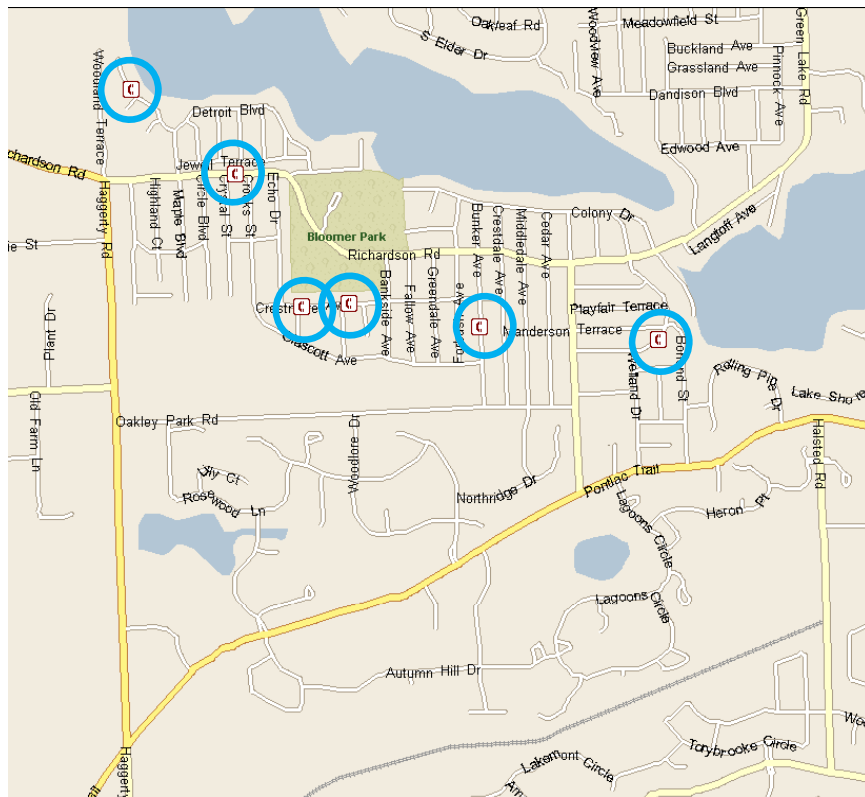


- **Map, detect and verify outages**
- **Identify if the problem is before or after the meter**
- **Verify restoration**
- **At times, make service corrections before customer realize they are out**
- **Collect load information to support reliability planning**
- **Use disconnect switch on Police Fire request**



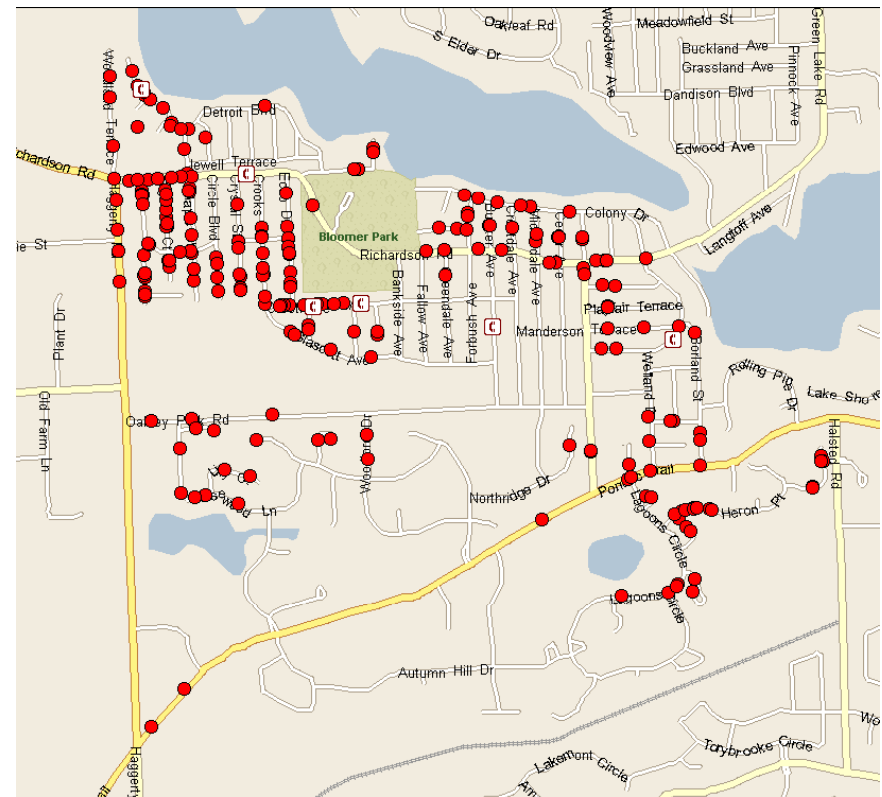
Storm control with AMI provides real-time geographic outage information


In a world without AMI, limited information is collected monitoring customer calls



 Customer Phone call reporting power outage

AMI provides immediate outage location information



 Meter generated power outage alarm

As storm develops the AMI system provides a real-time geographic picture of operational status

The Optional Smart Home technology provides tools so customers gain awareness of energy use

DTE Energy®



Devices/ Systems

Current program

- Optional Program
- AMI Meter
- In-home displays of pricing and customer usage
- Programmable Thermostats
- Smart Appliances
- System Gateway

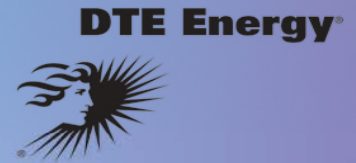
Future program

- Other utility meter
- Plug-in Hybrid Electric Vehicle
- Local energy sources and storage

Key Services

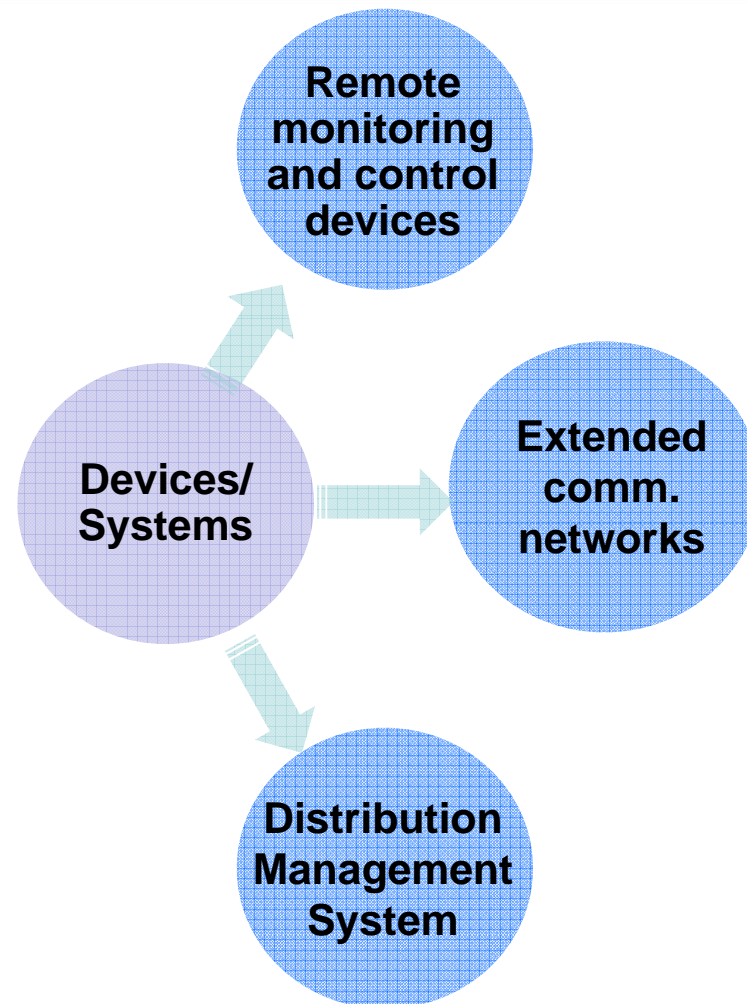
- Display of energy use and pricing signals in IHDs
- Energy consumption information and remote thermostat controls
- Time of day pricing and pre-pay option
- Programming of appliances to respond to time of day pricing
- Customer awareness
- Training for participating customers

Smart Circuit technology, monitor and analyze the distribution system

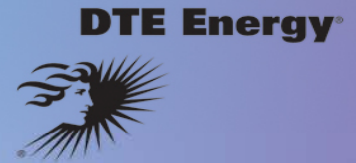


Key Features

- **Self-healing**
- **Intelligent switching and fault diagnosis**
- **Voltage control**
- **A complete and connected picture**
- **System level diagnosis and modeling applications**
- **Business intelligence**



Some Frequently Asked Questions



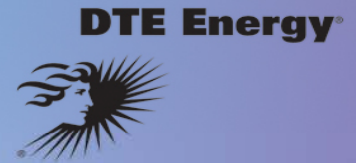
What will the new meter look like?

The new advanced meters will be digital meters with a blue face plate.

In most cases, DTE Energy natural gas meters will be retrofitted with an advanced metering module which is installed behind the dial index of the existing meter.



Some Frequently Asked Questions



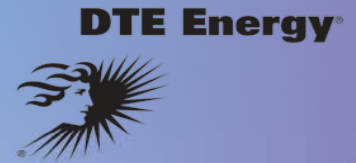
Is the advanced network secure?

Cyber security is a familiar concept to the utility industry. We have extensive experience maintaining security on the information systems needed to operate the electrical grid. Installing advanced meters adds a new component to our system, but the meters, communications and information management will be subject to the same Department of Energy security standards that keep the grid secure.

How will my personal usage information be protected?

As currently and in the future, DTE Energy takes information protection very seriously. Protection begins at the meter itself. Specialized meter technology defends against hacking and information is encoded whenever your data is transmitted. Once transmitted, your private information is protected in the same way it has always been, through constant monitoring for evolving threats and system improvements.

Some Frequently Asked Questions



Will the meter increase my energy bill?

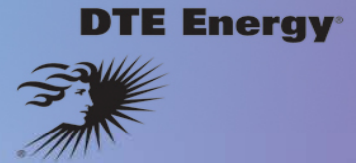
Like all electric meters, advanced meters measure the energy used in your home or business. The meter itself has no impact on your electricity rate or your energy use.

Are the new meters accurate?

A report issued in July 2010 by an independent consultant for the Public Utilities Commission of Texas said that based on the results of accuracy tests, 99.6 percent of the meters tested were determined to be accurate according to American National Standards Institute (ANSI) standards.

The consultant's research also found that the advanced meters consistently performed better than electromechanical meters.

Some Frequently Asked Questions



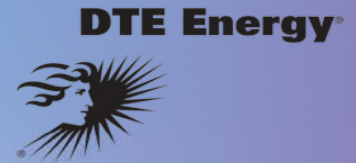
How will an advanced meter help me save money on my bill?

In an effort to help the customer make their energy use decisions, they can view their previous day usage on line

This program enables customers to view the data that has been measured by the advanced meter since it was installed.

This information can help you reduce your energy use. You'll also be able to use a wide variety of tools on the dteenergy.com web site to manage your energy use and learn how to save money

Some Frequently Asked Questions



I've read the advanced meter will give utilities too much control over my energy usage. Is that true?

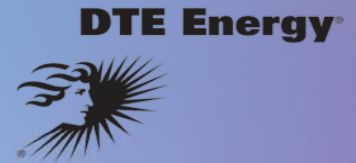
Actually, you control your usage, not the utility.

Advanced metering gives *you* more control.

Advanced meters do provide more information than traditional meters. Currently, you can obtain the information you need to save money and save energy from our website or by contacting a customer representative.

As with any service, it's necessary to measure consumption for billing purposes. DTE Energy records your electric consumption just like your cell phone provider tracks your cell phone use in order to bill you.

Some Frequently Asked Questions

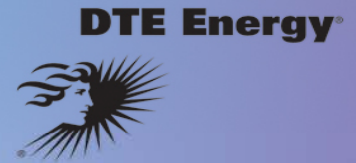


Are advanced meters within Federal Communications Commission (FCC) recommended levels of exposure to radio frequency emissions?

Yes. Based on years of study and research, the FCC, together with other organizations such as the World Health Organization, have adopted Maximum Permissible Exposure limits for radio transmitters of all types, including advanced meters.

This standard includes a conservative margin of safety, just in case some health effects are too subtle to have been found. Even so, advanced meters operate significantly below the limit.

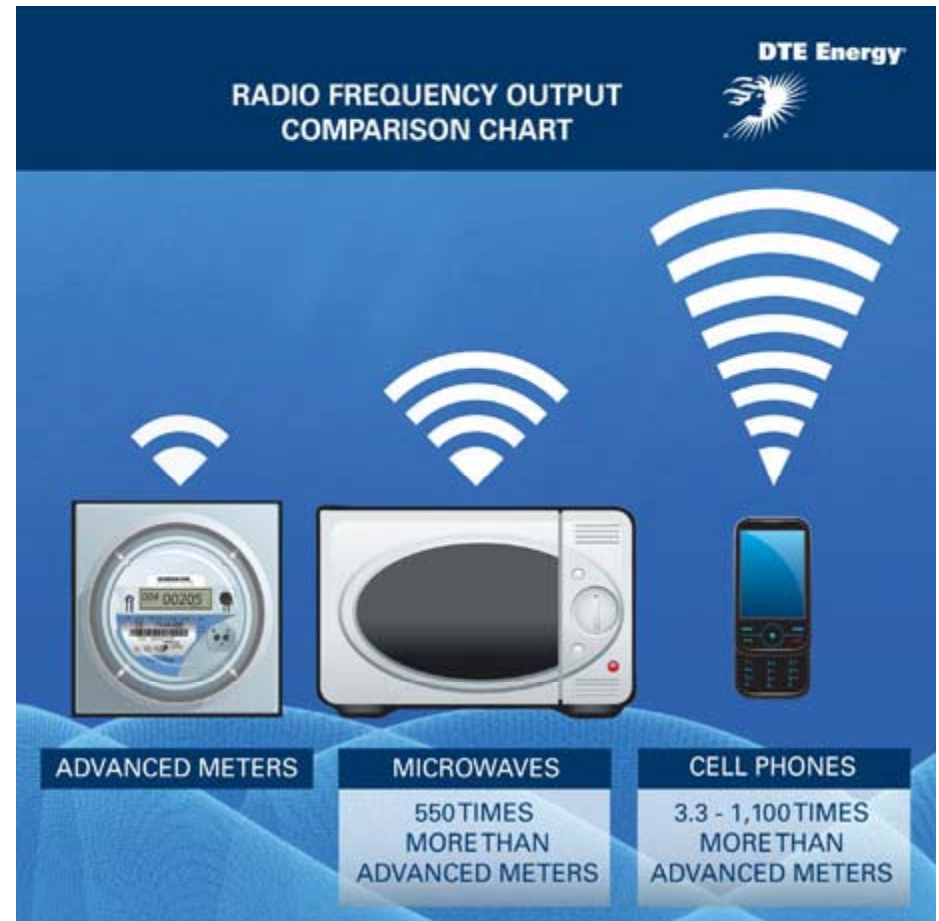
Some Frequently Asked Questions



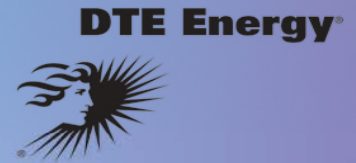
Do advanced meters cause health concerns?

The advanced meters use very low-power radio frequency (RF) waves to transmit your electricity usage data to DTE Energy. Several familiar devices produce stronger RF fields, including microwaves cell phones, baby monitors and cordless phones.

In fact, a person speaking on a cell phone has 3.3 to 1,100 times more RF exposure than a person standing two feet from an active advanced meter.



For additional information and a complete list of FAQ, visit our web site or view our video



DTE Energy web site

www.dteenergy.com

View our Smart Currents video at

www.youtube.com/user/DTEEnergyCompany#p/u/11/vtzH1TPEmXE

Video is also available on DVD