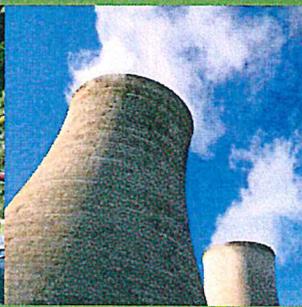




DTE Energy[®]

Advanced Metering Infrastructure (AMI)

*Community Presentation
January 2016*



- 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
- Over 2.9 million meters and modules have been installed by DTE Energy. Our installation started in 2008 in Grosse Ile. We are currently installing in Macomb, St. Clair and Wayne counties
- Advanced Metering Infrastructure (AMI) enables two-way communication between the meter and the central system.
- Other parts of the world are installing AMI as well
 - In North America, as of 2014: Over 57 million smart meters have been installed and IEE estimates that approximately 65 million smart meters will be deployed by 2015. (Source: Institute for Electric Efficiency, Federal Energy Regulatory Commission)
 - Every State in the US has some level of AMI installations underway or complete
 - 67.9 million smart meters already in use across the 30 European countries
 - Canada was essentially completed in 2012

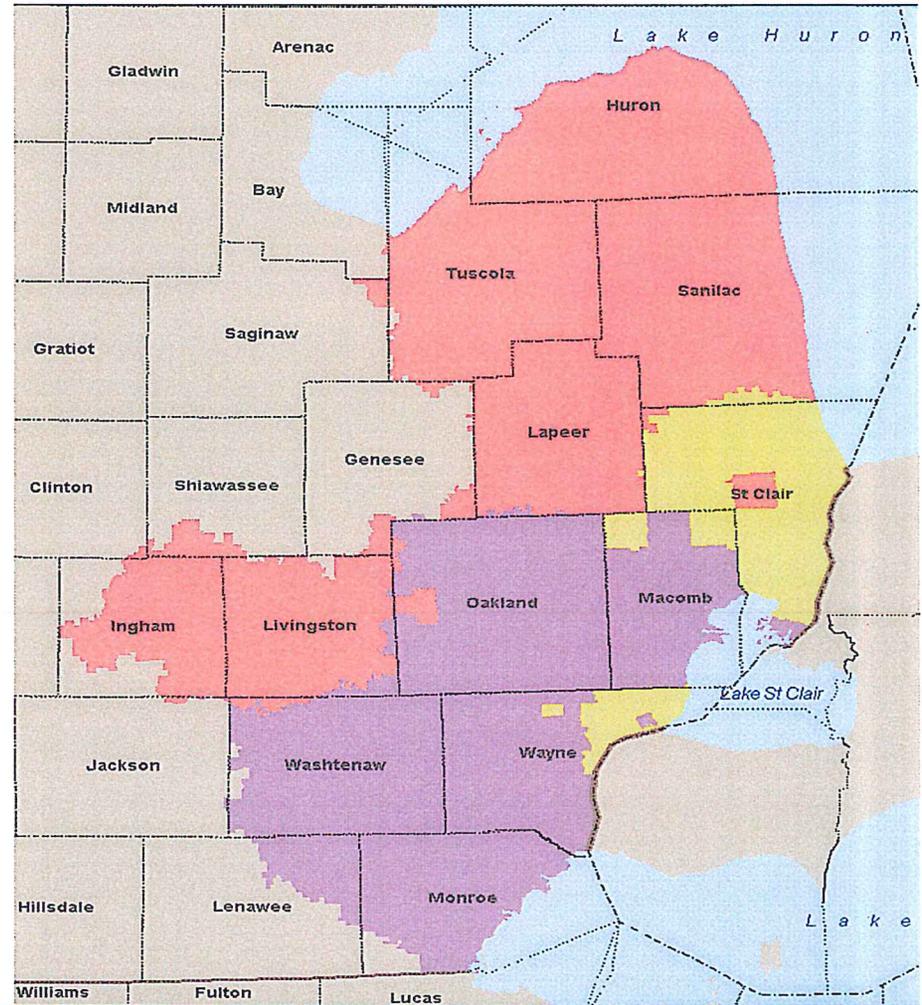
Total AMI Installation Map – December 2015 and future rollout plans



Total AMI Installations

- AMI Installations 2016 - 2017
- AMI Installations in Progress
- AMI Installations > 90% Complete

Total Project Installs - End of 2015	
Product	Total
AMI Electric	2,195,170
AMI Gas	540,568
AMR	247,570
Grand Total	2,983,308

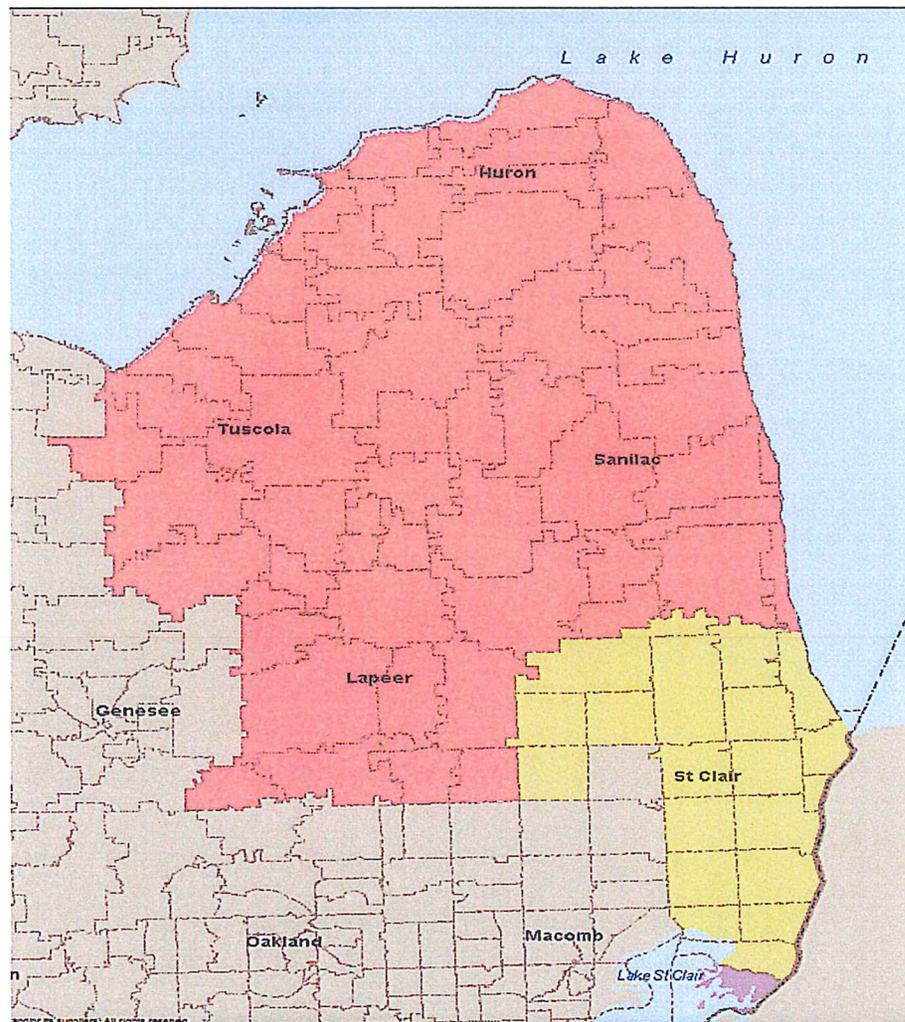


AMI Rollout Plans for the Thumb



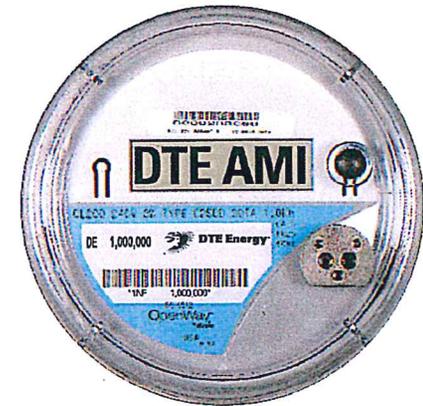
Thumb Area AMI Installations

- AMI Installations 2016 - 2017
- AMI Installations in Progress
- AMI Installations > 90% Complete



AMI increases actual meter reads, improves customer communications

- Improves billing accuracy by eliminating manual meter reading and estimated reads. Provides customer special reads in real time.
- Provides the customer with real-time energy use data through the DTE Insight app for iPhone and Android
- Allow customer call representatives to better serve customer's billing questions with accurate, timely historical data.
- Allows remote reconnect / disconnect capabilities for customer turn on/turn off requests.
- Provides enhanced theft and tamper detection.
- New products and customer friendly rate options becoming available. (bill alerts / ability to select payment cycle)



DTE Insight Mobile Application Provides Energy Awareness for the Customer

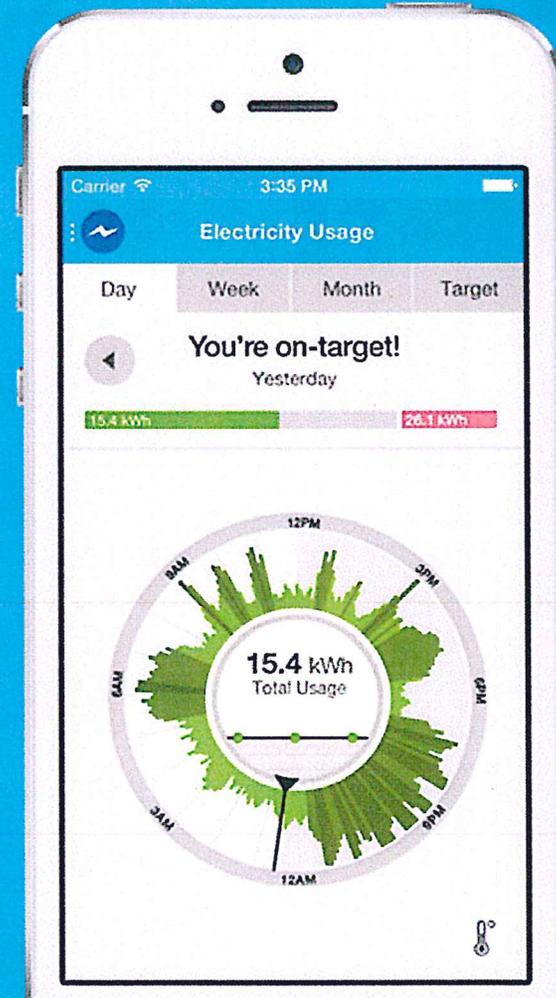


“How can I be more aware of my Energy Use?”



DTE Insight :

- Discover
- Identify
- Explore
- Save



USE LESS.
**SAVE
MORE.**

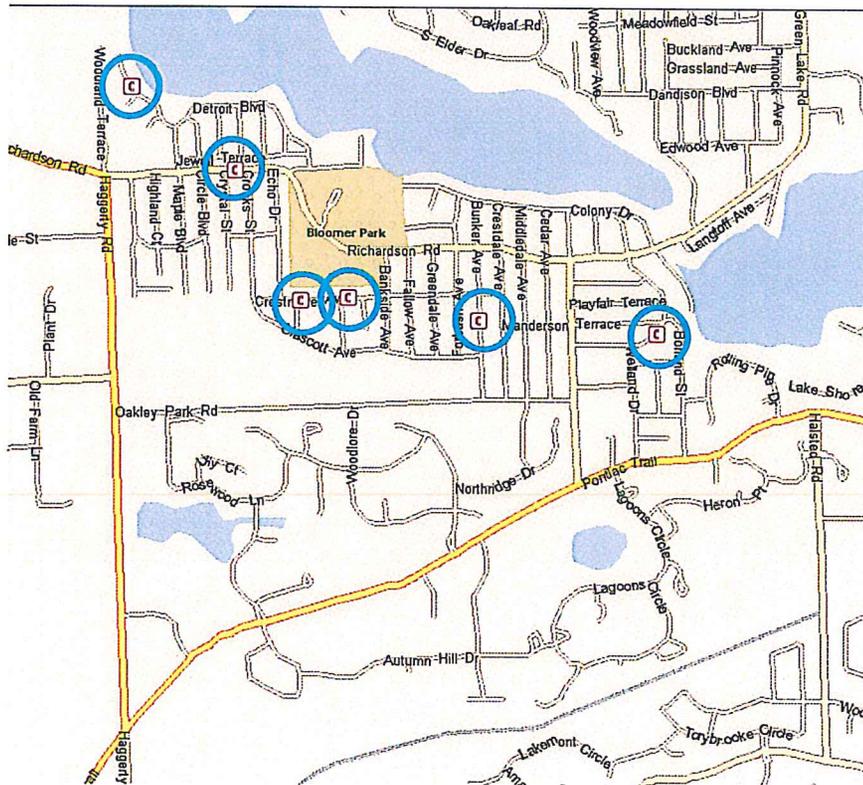
AMI vastly improves the quality and reliability of energy delivery



- Map, detect and verify outages and prioritize restoration
- Identify if the problem is before or after the meter
- Verify restoration
- Make service corrections before customers realize they are out
- Collect load information to support reliability and distribution planning
- Use disconnect switch on Police/ Fire requested calls
- Crews can now view AMI data from their truck computer

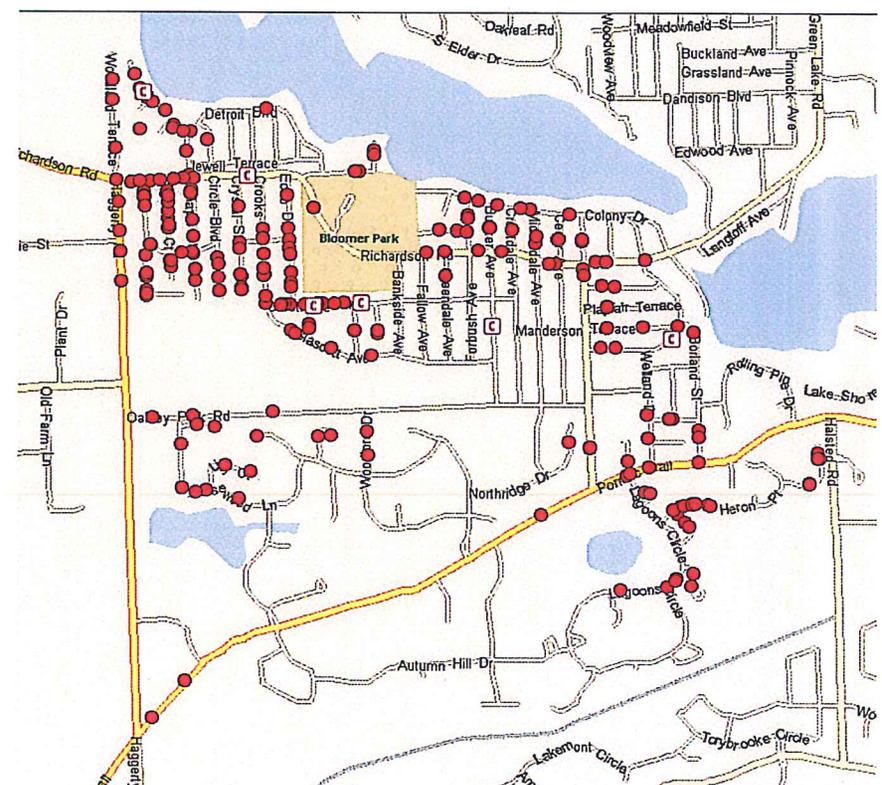
Storm control with AMI provides real-time geographic outage information

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



 Customer Phone call reporting power outage

AMI provides immediate outage location information



 AMI Meter generated power outage location data

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

Labor Day weekend 2011

Customer Concerns Addressed



- A small group of individuals have expressed concerns about AMI meters. Their questions center primarily on privacy, radio frequency waves and safety/health issues.
- Health and Safety – studies have shown that meters using RF technologies pose no health risks. RF signals in meters are significantly less than cell phones, microwave ovens, baby monitors, laptop computers and wireless routers, among others.
- Privacy – Privacy guidelines are in place by the MPSC, advanced encryption technologies are in place to protect data.
- **DTE Energy believes there is absolutely no merit to these concerns**

“Opt Out” option finalized by MPSC May 16, 2013



“Opt Out” option (U-17053) was filed with the MPSC July 31, 2012

- Final program finalized May 16, 2013
- Who can opt out?
 - Any residential customer for any reason
- How do I opt out?
 - Call 800-477-4747
- Quote from U-17053 Opt Out case

“APPLICABILITY: Available to individual residential electric customers at a specific site location who elect to have a non-transmitting meter(s) installed at their premises. A Customer electing this Non-Transmitting Meter Provision will have a non-transmitting meter(s) installed at the customer’s service location, have the meter read manually and be subjected to the following charges.”

- Rates: Initial fee: \$67.20 per request
- Monthly Charge: \$9.80 per month

- **The Radio communication is turned off**

Radio Frequency

Myth:

Smart meters will emit high levels of radio frequency radiation into my home.



Fact:

RF from smart meters is similar to common every day devices such as radios, cell phones, baby monitors, wireless networks, etc.

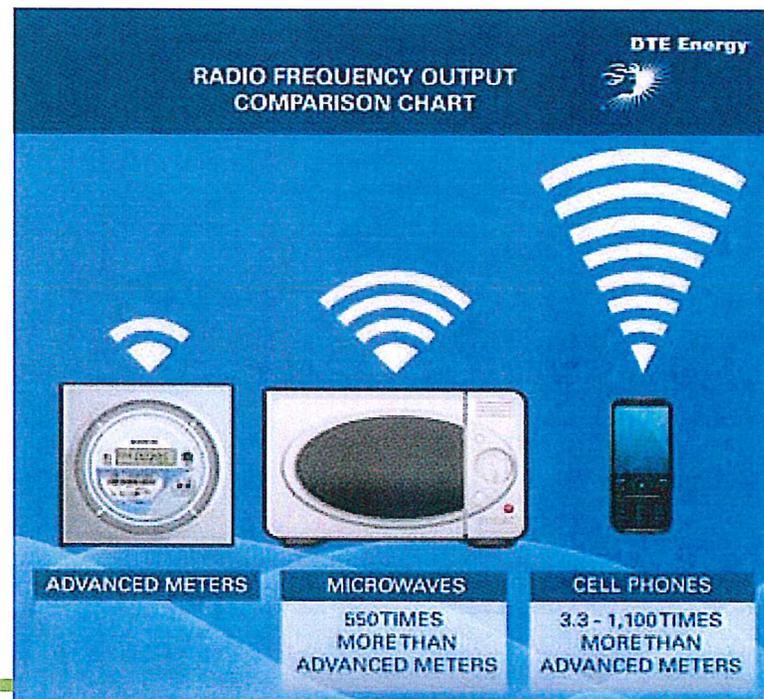
The RF exposure from smart meters is less than the exposure from cell phones.

Exposure levels decrease significantly as distance from the transmitter increases.

RF weakens as it passes through barriers.

Meters comply will all FCC regulations on RF

- SCE Video
- https://youtu.be/_GgoCvO0oac



Connect Disconnect Switch

Myth:

Smart meter
company
Disconnect customers at will



Fact:

Whether manual or remotely through the Smart meter, Connects and Disconnects follow a process approved by Michigan Public Service Commission (MPSC)

- Move in / Move out
- Collections
- Consumer requests



Move in / Move out



Collections

Appliances and Tracking of electronic devices

Myth:

Smart meters track, monitor and shut off individual specific electronic devices.



Fact:

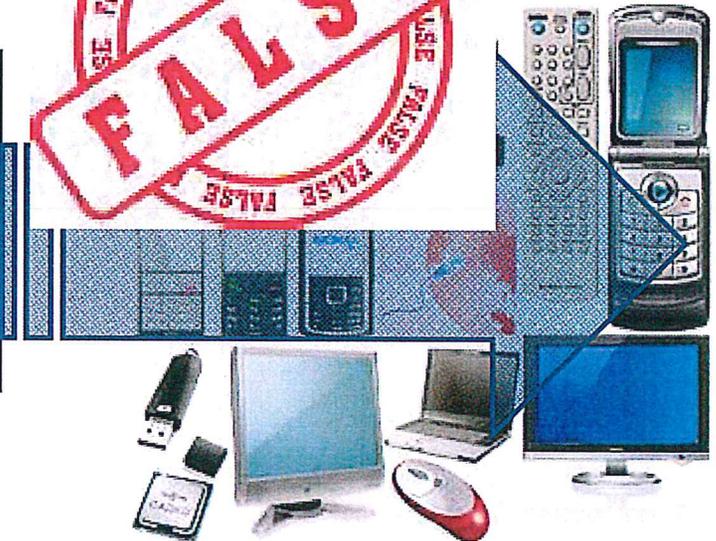
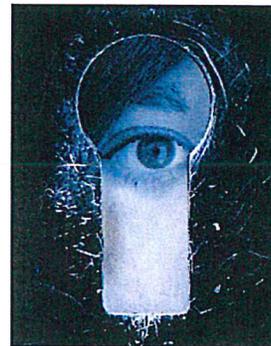
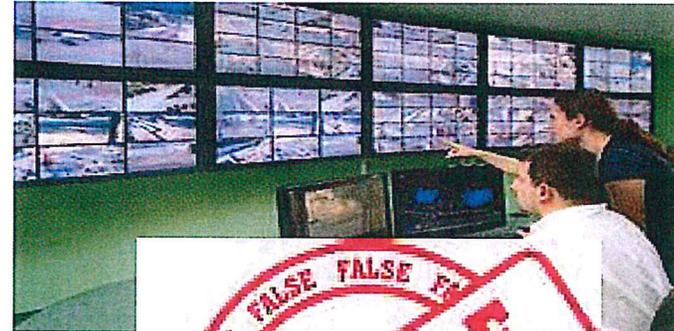
Smart meters do not identify electrical devices in the home or record when they are operated.

Smart meters only record total energy usage, but at intervals such that the customer can assess their own energy use profile

Smart meters are not able to turn off your individual appliances at will

There is no requirement or mandate for you to purchase a "Smart" appliance

Meter accuracy is verified through stringent quality control and 3rd party independent testing



Security and Surveillance Devices



Myth:

Smart meters will give criminals access to personal data and are surveillance devices



Fact:

No Customer specific data like social security and driver's license numbers are transmitted or even known to the meter

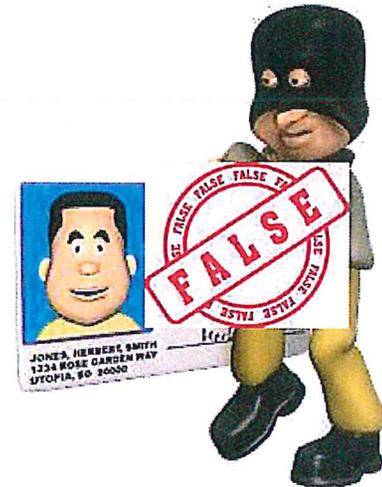


All usage data that is transmitted is encrypted throughout the process

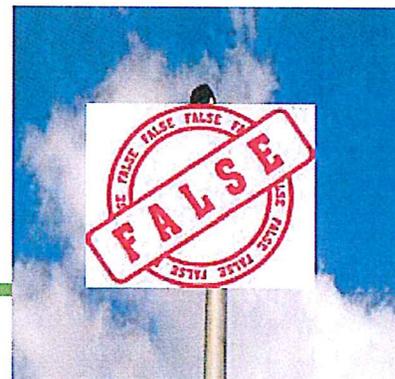


No Customer data is sold to 3rd parties

Smart meters do not monitor household activity. They only record total energy usage for the home or business.



DTE fully complies with the MPSC policies regarding privacy of data (U-17102)



Questions?



**For additional information and a complete
list of FAQ's visit our web site**

**DTE Energy web site
www.dteenergy.com**