

WE CARE ABOUT YOUR HEALTH AND SAFETY



How safe are smart meters? We sort out the myths and the facts.

Smart meters are already working safely in 70 million homes and businesses across the United States. We waited to install smart meters until we were confident the technology had fully matured and the meters would exceed all of our safety and security standards.

HERE ARE SOME COMMON MISCONCEPTIONS YOU MAY HAVE HEARD ABOUT SMART METER SAFETY AND THE FACTS THAT CORRECT THE MYTHS.

MYTH | Smart meters are a health threat because they use radio frequency waves.

FACTS

We all live with radio frequency (RF) waves every day. RF is a form of electromagnetic energy that moves through space, and it's used for everything from radio and television broadcasting to the cell phones, cordless phones, Wi-Fi routers, baby monitors, garage door openers and microwave ovens in our homes.

Smart meters, which also use RF, are already safely tracking energy use in more than half the homes in the United States. They've also been used safely for years in parts of Europe and other countries. These digital meters transmit data using low-watt RF waves that are proven to be safe and comply with limits set by the Federal Communications Commission (FCC).

What do the experts say? The World Health Organization has concluded that no adverse health effects have been demonstrated to result from exposure to low-level RF energy such as that produced by smart meters. In addition, a report by the California Council on Science and Technology concluded: "Exposure levels from smart meters are well below the [FCC's standards] for such [health] effects," and "There is no evidence that additional standards are needed to protect the public from smart meters."¹

It's good to understand a few other key facts about smart meters: First, they transmit RF energy only for short periods each day at very low wattage. In fact, an Electric Power Research Institute analysis of 47,000 smart meters installed in California found that 99.5% of the meters were transmitting for approximately three minutes or less daily.²

The American Cancer Society also notes that because the smart meter is located outside the home, people are much farther away from the source of RF waves than some other more typical sources of exposure, like a Wi-Fi router or cell phone.

Altogether, this means that living in a house with a smart meter provides very little exposure to RF.

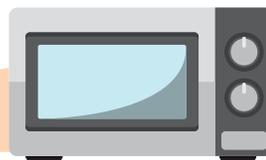
Typical RF Values*



STANDING TWO FEET FROM A SMART METER (BASELINE)



SITTING IN A CAFE WITH WI-FI: 1.1 - 2.2X MORE



STANDING TWO FEET IN FRONT OF A MICROWAVE OVEN: 550X MORE



HOLDING AN ACTIVE CELL PHONE TO YOUR HEAD: 3.3 - 1,100X MORE



HOLDING A WALKIE-TALKIE TO YOUR HEAD: 55 - 4,600X MORE

*Source: Health Impacts of Radio Frequency from Smart Meters by California Council on Science and Technology, April 2011.

MYTH | Smart meters have a higher radio frequency than cell phones.

FACTS

According to the American Cancer Society, the amount of RF waves you could be exposed to from a smart meter is much less than what you could be exposed to from a cell phone.³

MYTH | Smart meters increase the risk of fires or explosions.

FACTS

Fire concerns were related to early model smart meters from a different manufacturer – not the model or manufacturer we are using. We studied smart meters and waited to adopt the technology until it was mature enough for us to confidently say that it exceeds all of our safety and security requirements. Today's smart meters are safe and are already being used at more than half the homes in the United States.

Our smart meters are put through extensive testing to ensure their safety. Not only do they meet or exceed ANSI standards, they are certified by UL testing labs, they are tested by a third party, and, our metering team has made sure they are accurate and safe. We also require the meter manufacturer to test each meter prior to shipment, and we review all test results.

Our qualified installers follow precise, step-by-step installation procedures when switching out meters. This includes carefully inspecting the meter base and making needed repairs before installing the new meter. We also use a socket jaw tester, a specially designed tool that measures tension associated with installing a meter into a socket. The tester provides immediate feedback on whether the socket jaw tension is adequate.⁴

About Opting Out

We're installing smart meters at no cost to our customers as part of our strategy to modernize the power grid. However, if you do not wish to upgrade to a smart meter, you may opt out for a monthly fee that covers the cost of manually reading the meter.



FOR MORE INFORMATION on smart meters, visit PacificPower.net/SmartMeter or call **1-866-869-8520**.

SMART METERS. SMARTER TOGETHER.

¹ <http://ccst.us/publications/2011/2011smart-final.pdf>

² <http://www.whatissmartgrid.org/smart-grid-101/fact-sheets/radio-frequency-and-smart-meters>

³ <https://www.cancer.org/cancer/cancer-causes/radiation-exposure/smart-meters.html>

⁴ https://www.elp.com/articles/powergrid_international/print/volume-19/issue-12/features/preventing-electric-meter-fires-two-perspectives.html