fact sheet

ENSURING SAFE TECHNOLOGY IS PART OF A STRONGER, MORE RELIABLE GRID

ComEd is modernizing the energy grid to improve reliability and provide better service. ComEd also plans to introduce new, state-of-the-art technologies to create a smart grid that supports the 21st century economy. Smart meters are a key component of this effort.

Some customers have asked us about potential health risks associated with smart meters, including the effects of radio frequencies (RF) emitted from these meters. Although smart meters use radio technology, under typical circumstances a person would receive significantly less RF exposure from a smart meter than from many other electronic devices that are used daily, including cordless phones, cell phones, microwave ovens and baby monitors.

The bottom line:

- Numerous studies conducted on the effects of RF on human health found no evidence that RF emissions from smart meters pose any specific health risk.
- Smart meters comply fully with Federal Communications Commission (FCC) health and safety standards and emit RF signals far weaker than levels permitted by the FCC.

Our smart meters comply fully with Federal Communications Commission (FCC) health and safety standards and emit RF signals far weaker than the levels permitted by the FCC. There is no evidence to suggest that RF emissions from smart meters pose any specific health risk.

The RF exposure a person might encounter from a smart meter in a typical household setting can be significantly less than the RF signals they are exposed to from common, electronic devices found within the home.

HOW SMART METERS WORK

ComEd's smart meters contain two, low-power radios:

- One low-power radio transmits energy-usage information back to the utility for billing purposes; the same job that meter readers now perform.Transmissions are intermittent, which means this low-power radio does not continuously broadcast all day long.
- The other low-power radio allows energy-usage data to be sent to an in-home device, such as an energy display or a "smart thermostat" that customers would elect to purchase and install within their homes. This radio is neither turned on nor used unless the customer requests that the smart meter be connected to one of these in-home devices.

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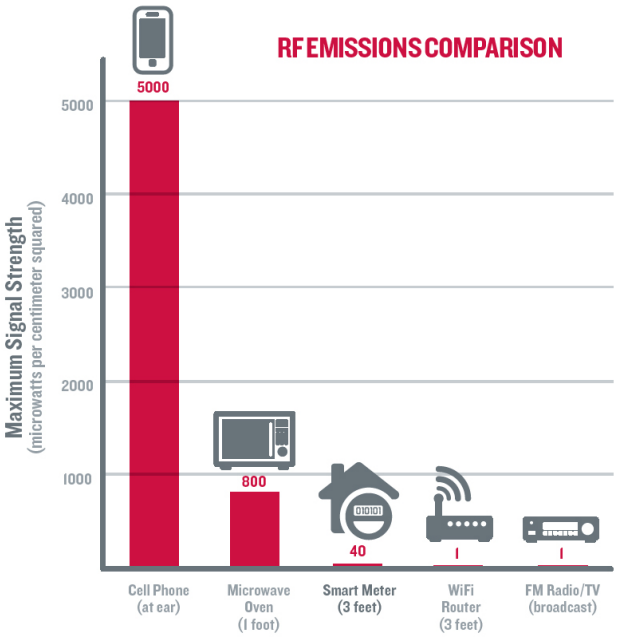
UNDERSTANDING RADIO FREQUENCY

Radio frequency (RF) describes the energy associated with electromagnetic waves. Any device that utilizes wireless technology produces RF emissions, so we encounter RF emissions daily from many sources. The RF exposure a person might encounter from a smart meter in a typical household setting can be of significantly less strength than RF signals a person may be exposed to from many common, electronic devices found within the home. Because of their proximity in the home, the following list of home electronics can subject people to far stronger RF emissions than a smart meter:

- Cell phones
- Microwave ovens
- Wireless computer networks (Wi-Fi)



Adapted from the California Council on Science and Technology smart meter study published in April 2011.

As the chart in the upper right shows, the exposure from a cell phone is hundreds of times greater than exposure from a smart meter. The chart shows RF levels for smart meters based on the meter always being in "transmit" mode (smart meters do not continuously broadcast). Lastly, the strength of the RF signal originating from a smart meter diminishes rapidly the further a person moves away from it; and objects between a smart meter and a person, such as a brick wall, further reduce the amount of RF signal to which that person might be exposed.

RF AND YOUR HEALTH

The safety of ComEd's energy grid for its customers and employees is the top priority for ComEd. The company continues to monitor scientific research conducted on RF emissions and, to date, finds no evidence that RF emissions from smart meters pose any specific health risk. In addition, the FCC sets limits on the maximum permissible exposure for emissions of RF-emitting devices. The type of smart meter used to help build the smart grid operates at levels that are hundreds of times lower than the FCC limit.

For more information, visit **ComEd.com/SmartMeter**