Xcel Energy is building the next generation of our energy grid, the advanced grid. The advanced grid will give customers more of what they expect from Xcel Energy—clean, reliable energy, new ways to save energy and money, and a better experience for all our customers.

New, smart meters are an important part of building this advanced grid. Smart meters are not new to the electric utility industry as there are nearly 80 million smart meters already in place across the U.S. Xcel Energy will start to use intelligence-enabled smart meters to improve the customer experience and advance our utility operations. In the future, the advanced grid will make it possible for you to choose pricing plans and energy savings options that work best for your household. New digital energy grid technologies will help us prevent outages and, in some cases, enable us to automatically reroute power to shorten or prevent any service interruptions. Since the technology is new to Xcel Energy customers, we want to make sure you know there are no health or safety concerns related to smart meters.

Understanding Radio Frequency Technology
Smart meters use radio frequency technology, but with significantly lower radio frequency levels than cell phones, most home appliances and WiFi routers. Xcel Energy’s smart meters will emit radio frequency lower than the Federal Communications Commission (FCC) guidelines established to protect the public. All Xcel Energy meter systems are fully-authorized, licensed and in compliance with the FCC’s guidelines.

Radio Frequency Levels in Common Household Devices

<table>
<thead>
<tr>
<th>Device</th>
<th>RF Level (W/m²)</th>
<th>Times Greater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell phone</td>
<td>0.19</td>
<td>12,667</td>
</tr>
<tr>
<td>Cordless phone</td>
<td>0.12</td>
<td>8,000</td>
</tr>
<tr>
<td>Microwave oven</td>
<td>0.0047</td>
<td>313</td>
</tr>
<tr>
<td>Wifi signal</td>
<td>0.001</td>
<td>67</td>
</tr>
<tr>
<td>Natural RF from human body</td>
<td>0.0003</td>
<td>20</td>
</tr>
<tr>
<td>Natural RF from Earth</td>
<td>0.00013</td>
<td>9</td>
</tr>
<tr>
<td>Smart meter</td>
<td>0.000015</td>
<td></td>
</tr>
</tbody>
</table>

Quick Facts about Safety and Security

Customers will control how they use electricity.
Smart meters will provide advanced measuring and troubleshooting features. These meters will not control your appliances or other items in the home. In the future, these meters will help you to understand what appliances are using the most energy, giving you transparency and more control over your energy usage.
**Security you can trust.**
Xcel Energy is vigilant about security in all operations. No personal customer information is stored on or transmitted from the meter. All information transmitted between the meter and Xcel Energy’s network is encrypted, and the encryption process is frequently reviewed and enhanced. More information on Xcel Energy’s Privacy Policy can be found on [xcelenergy.com](http://xcelenergy.com).

**There are no health concerns with smart meters.**
No evidence has been found of smart meters causing health issues. There are 80 million smart meters already installed in the U.S. that meet or exceed the FCC requirements. Many of the components in the smart meters are the same as what’s inside existing meters. The RF signals emit the same type of low-energy radiation that most of us are exposed to every day from WiFi, Bluetooth, and cell phones. According to the American Cancer Society, RF radiation does not cause cancer. RF radiation does not have enough energy to remove charged particles, such as electrons, and therefore is too weak to damage DNA or cause health complications.

The resources linked below offer additional information on Radio Frequency and Advanced Metering Infrastructure:

- Electric Power Research Institute, *A Perspective on Radio-Frequency Exposure Associated with Residential Automatic Meter Reading Technology*
- Electric Power Research Institute, *Radio-Frequency Exposure Levels from Smart Meters: A Case Study of One Model*
- Utilities Telecom Council, *No Health Threat from Smart Meters*
- Edison Electric Institute, *Smart Meters and Your Health*
- American Cancer Society, *About Smart Meters*
- National Energy Technology Laboratory, *Advanced Metering Infrastructure*
- Smart Energy Consumer Collaborative, *Radio Frequency Fact Sheet*
- Smart Energy Consumer Collaborative, *Myths vs. Facts: The Truth about Smart Meters Fact Sheet*
- California Council on Science & Technology, *Health Impacts of RF Exposure from Smart Meters*