



FortisAlberta customers have automated meters that measure and record electricity consumption on a daily basis.

WHAT ARE ELECTROMAGNETIC FIELDS?

Electromagnetic fields (EMFs) are invisible lines of force that surround any electrical device. All uses of electricity will generate EMFs when any electrical device is turned on. The field is strongest next to the source and diminishes rapidly as you move away.

On a daily basis, people are exposed to EMFs as they operate or pass near any electrical device. EMFs are produced by the current flowing through appliances, electrical devices, the household wiring that powers them and the power lines that provide electricity to your home.

All uses of electricity will generate electromagnetic fields. As this diagram illustrates, the field is strongest next to the source and diminishes rapidly as you move away.

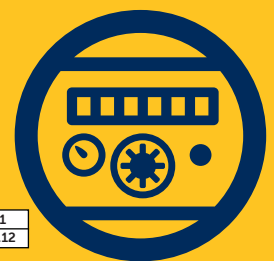


←-----→

Distance in metres

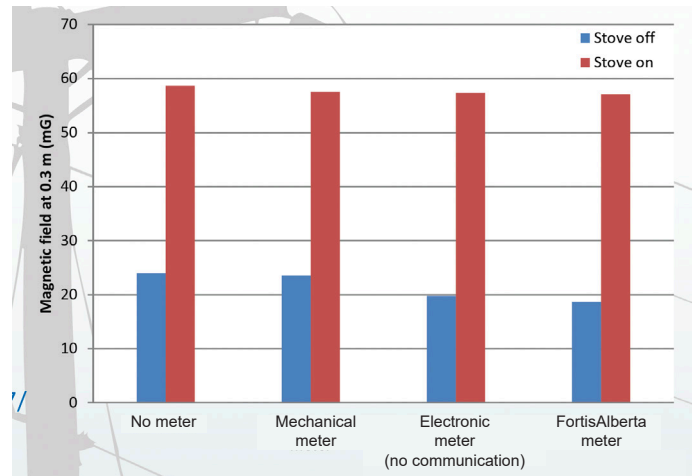
10	9	8	7	6	5	4	3	2	1
0.0012	0.0015	0.002	0.003	0.004	0.005	0.008	0.02	0.03	0.12

Power Density (W/m²)



Do FortisAlberta meters generate EMFs?

A study conducted by the University of Alberta found no comparable difference when measuring EMF levels at a meter location with no meter, an older mechanical meter or an electronic meter with or without automated communication. The contributor to EMFs at the meter location is a result of the current flowing through the meter to operate appliances and electrical devices in the home. In this example, the action of turning a stove on or off will result in a change in the level of EMFs at the meter location.



Responsible practices relating to health and safety are a cornerstone to FortisAlberta operations and are of utmost importance to us. We are committed to performing our due diligence in keeping abreast of new information as it becomes available, sharing such knowledge with our customers and the public and reviewing as necessary, our electrical equipment design and operational practices.

How do EMF levels differ in the home and meter locations

In every home, EMF levels change according to the current required to operate appliances and electrical devices. These levels will generally peak in the late afternoon when families are at home and decline at night or during the day when most devices are turned off.

The type and number of electrical devices running in a home determines the total amount of current flow at the meter location. This in turn influences the EMF levels at the meter location. Keep in mind, EMF is strongest next to the source and diminishes rapidly as you move away.

EMF references and resources

Health Canada

<https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/power-lines-electrical-appliances.html#w>

Government of Canada

<https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/power-lines-electrical-appliances.html>

Electricity Canada

https://www.electricity.ca/files/reports/english/EMF_Page2_2018.pdf

World Health Organization

https://www.who.int/health-topics/electromagnetic-fields#tab=tab_1