Electric and Magnetic Fields

Electric and Magnetic Fields (EMFs) are around us every day. They are found wherever we use electricity – whether that's a television, a computer, a hair dryer, or a power line.

Electric fields are produced by voltage and formed whenever a connection is made with an outlet. The higher the voltage, the stronger the electric field. Electric fields are measured in volts per metre (V/m).

Magnetic fields are produced when an electric current is flowing through an appliance or wire. The greater the current, the stronger the magnetic field. Magnetic fields are measured in gauss (G) or tesla (T).

When you plug the power cord of an appliance into a wall socket, the connection creates an electric field along the cord. When you turn the appliance on, the flow of electricity through the cord also creates a magnetic field.

SaskPower and EMF

Power lines, transformer boxes and electrical substations emit EMF that are extremely low frequency.

We follow EMF research closely and participate in forums and regulatory proceedings to ensure we're current on EMF research and regulations.

We design and operate our electrical generation, transmission and distribution systems to comply with recognized standards, and we provide EMF estimates for proposed electrical facilities. This ensures that we comply and cooperate with regulatory agencies established at both provincial and federal levels.

We measure EMF in and around SaskPower facilities. You can request an EMF reading around residential, commercial and public buildings too.

Health and EMF

International health agencies, including Health Canada, and a large number of independent scientific bodies have studied EMF extensively and have been unable to establish any associated health risks from exposure to extremely low frequency EMF. Health Canada provides more information on this topic at Canada.ca.[1]

Please email **PublicEngagement@saskpower.com** if you'd like to discuss further.

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1. Health Canada (n.d.). Power lines and electrical products: Extremely low frequency electric and magnetic fields. Government of Canada. Retrieved September 20, 2023, from https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/power-lines-electrical-appliances.html

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