

ELECTRIC AND MAGNETIC FIELDS - EMF

WHAT IS EMF?

"EMF" is an abbreviation for "electric and magnetic fields," or "electromagnetic field," and sometimes as shorthand for "magnetic field." EMFs are created wherever electricity is present. Common sources of EMF in our daily environments include electrical wiring in homes, offices, stores and public buildings such as schools and hospitals, home appliances, office and business equipment, as well as overhead and underground power lines. Common exposures to EMF from household sources can exceed those created by power lines.

BODY OF EVIDENCE

A large amount of scientific research has been conducted on EMF. EMF studies have been done on leukemia, breast cancer, brain cancer, DNA damage, cancer clusters, birth defects, immune system damage, nervous system damage, Alzheimer's, ALS (Lou Gehrig's disease), Parkinson's disease, high blood pressure, heart disease, sleep disruption, and a number of other diseases and conditions. EMF may be one of the most studied exposures. In fact, more than 2,900 studies have been performed since the 1970s, costing more than $490 million.

Reviews by independent governmental and health authorities, including those conducted by the World Health Organization (WHO) and the U.S. National Institute of Environmental Health Sciences (NIEHS) have not concluded that exposure to electric power EMF causes or contributes to adverse health effects.

"DESPITE EXTENSIVE RESEARCH, TO DATE THERE IS NO EVIDENCE TO CONCLUDE THAT EXPOSURE TO LOW LEVEL ELECTROMAGNETIC FIELDS IS HARMFUL TO HUMAN HEALTH."

– World Health Organization
Electromagnetic Fields
https://www.who.int/news-room/q-a-detail/radiation-electromagnetic-fields

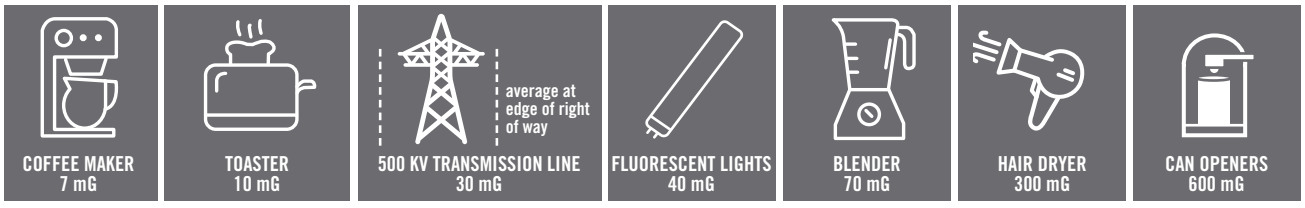
WHAT ITC IS DOING

ITC will conform to any applicable standard in any jurisdiction in which we operate. However, there are no federal standards or regulations governing the electric and/or magnetic field levels associated with transmission or distribution lines. Based on laboratory evidence, some scientific-consensus agencies have provided guidelines for acceptable, continuous-exposure of the general public to powerline magnetic-field levels. The magnetic field levels produced by our lines are far below these safety guidelines.

ABOUT ITC

ITC's investments in power transmission infrastructure lower electricity costs, improve service reliability and safety, and increase economic activity and tax revenues for customers, stakeholders and communities.

WHAT ARE THE EMF LEVELS FROM COMMON SOURCES? *Examples of EMF Sources in mG (milliGauss)



*People typically change activities and locations during a day, so we are exposed to a variety of sources of EMF and a wide range of field levels. These field levels are taken from the U.S. National Institute of Environmental Health Sciences (NIEHS) EMF Questions & Answers pages 33-35 (median level at 6 inches from appliances), page 36 (distribution lines), and page 37 (transmission lines). As noted by NIEHS, field levels of transmission lines can approximately double during peak loads, which occur about 1% of the time.

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