Electric and magnetic fields (EMF)



What are Electromagnetic Fields (EMF)?

Electric and magnetic fields are invisible lines of force that are part of the natural environment such as lightning, solar activity, and the earth itself. EMF is also produced wherever electricity flows including power lines, electrical wiring, and electrical equipment. The presence of EMFs is an essential part of the electricity process.

Is EMF the same as radiation?

No, the electric and magnetic fields generated by electricity use, known as EMF, are not considered a form of radiation. The term 'radiation' refers to the spread of energy away from a source; EMF does not spread energy away from its source.

How does Western Power ensure safety with regards to EMF?

EMF is carefully considered in the planning, location and operation of our network assets.

Western Power is guided by Australian and international health authorities and take a precautionary approach, in line with the Energy Network Australia EMF Management Handbook.

This includes applying industry best practice methods to our engineering and design solutions to reduce or mitigate EMF exposure.

According to the Department of Health, surveys of WA's power lines have shown the World Health Organisation limits have not exceeded in any publicly accessible area, including directly under powerlines.

That is why easements are in place, to mitigate any potential risk, by limiting long-term occupation under the lines. However, short-term activities under the lines or residential development bordering easements are deemed safe.

Are the EMF levels from high voltage power lines safe?

Yes. The EMF levels from our high voltage power lines are well within the safe exposure limits set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

The World Health Organization recognises two international guideline for ELF EMF exposure:

- International Commission on Non-Ionising Radiation Protection (ICNIRP) 2010
- IEEE Standard C95.1- Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0Hz to 300GHz.

ARPANSA is the Australian Government's agency responsible for regulating Commonwealth Government radiation protection practices.

Western Power adheres to the EMF levels recommended by ARPANSA and the exposure guideline limits recommended by ICNIRP.

Where can I find more information about EMF?

Visit the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) website at www.arpansa.gov.au

More information

For more information on Clean Energy Link, visit **westernpower.com.au**

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