

Living near substations

Is it safe to live near substations? Like with any infrastructure, people sometimes have questions about safety. This page provides answers to some of the common concerns we get asked about and helps explain why it is safe to live near substations.

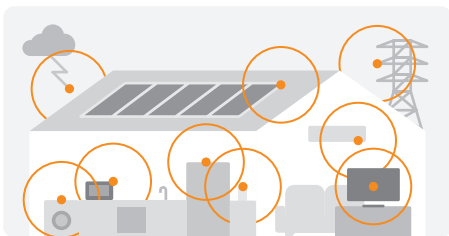
What are substations?

Substations are a vital part of how we get electricity to our homes, schools, and businesses. They're like electrical hubs where electricity is received at high voltage and changed to low voltage so it's ready for us to distribute to homes and businesses around the state. You'll find them in cities, in the suburbs and in regional areas.



Common concerns

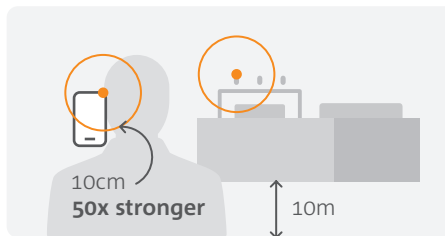
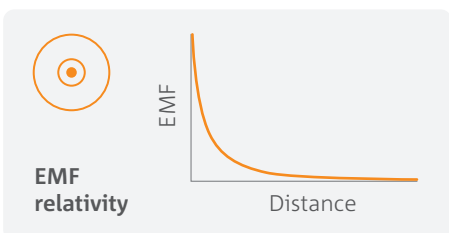
Electric and Magnetic Fields (EMFs)



EMFs are invisible fields of energy that happen naturally anywhere electricity is.

This means they're around lots of things we use every day, like lamps, TVs and mobile phones as well as powerlines and substations.

Distance matters (inverse square law):
Fields rapidly diminish with distance.



EMFs within 10cm of a mobile phone are 50 times stronger compared to within 10m of a substation.

Mobile phones actively emit radiation via their antenna to communicate with cell towers, while substations deliver electricity with EMFs as a side effect.

Various studies have looked for effects of EMFs. To date all have concluded that no causal link has been established between EMFs encountered in everyday life and health effects.

More information on EMFs can be found in our fact sheet:
<https://sapowernetworks.co/EMF-factsheet>

Noise

We make sure all newly installed assets comply with the Australian noise standard of **lower than 50dB**, and:

- Cooling fans only operate during hot weather.
- Enclosing equipment inside sound absorbing buildings.
- Replacing aging equipment.
- Using designs that reduce mechanical noise, such as quieter fans.

We can conduct sound measurements if required by customers.



Acoustic barriers around equipment

Common concerns

Aesthetic impacts

We understand maintaining a neat and tidy yard greatly contributes to safety, and we've been consistently committed to doing that.

We have also worked with local artists to transform substation walls into community-inspired artwork.



Substation yards kept neat and tidy

Sharing boundaries

A Substation Ground Penetration Permit – AAM029, and Before You Dig Australia (BYDA) confirmation is required before boundary clearance work.

Property owners must keep plants trimmed to prevent them from growing into restricted zones.



House and substation boundary fence

Traffic

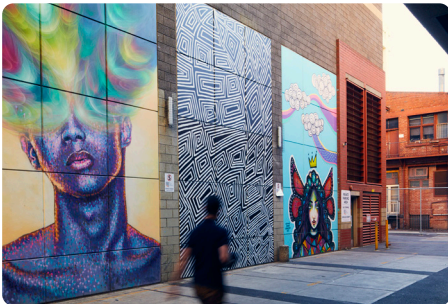
We work with the local council to minimise disruption for residents and commuters.

We provide proactive communication with neighbours via major project letter drops.

We limit noisy tasks and major asset delivery to specific hours.



Substation driveway



Community artwork on substation walls



Plants on substation boundary must be kept trimmed



Substation blending into CBD areas

Commitment to community

We make practical investments to keep our people and the community safe.

Heat flag zones and fire walls

We have identified heat flag zones and constructed fire walls to contain potential fires. This minimises the chance of a secondary fire hazard affecting neighbours.

Fencing and warning signs

We install secure fencing and warning signs to effectively prevent accidental entry.

Routine inspection and maintenance

We conduct regular inspections and maintenance to ensure equipment is operating safely and efficiently.

Monitoring and alarms 24/7

Our facilities are equipped with 24/7 monitoring systems and alarms, allowing us to respond timely to defects.

Emergency response procedures

Our emergency response plans ensure personnel are equipped to handle various emergency situations.

If you notice any unusual situations, please call our general enquiries line on 13 12 61 