

MANAGING BUSHFIRE RISK

FEBRUARY 2024

At Transgrid we are committed to ensuring the safety and reliability of our electricity transmission network while minimising the risk of bushfires.

We are subject to requirements of the electricity supply acts and regulations within the jurisdictions we operate. We design, construct, operate and maintain the electricity network using mature asset management practices that ensure the safety of the communities we interface, safety of persons working on the network, protect property, and prevent loss of electricity supply (including from bushfire).

As a responsible operator, we proactively mitigate bushfire risks through structured risk assessment and management processes that identify threats, such as failure of equipment that could start a bushfire, assesses the risk, and implement control measures that minimise such risks as low as reasonably practicable.



Here's how we're working to deliver a safer and more bushfire resilient future:

We factor bushfire safety into our design and construction activities

During design we:

- Conduct technical investigations and risk assessments that inform the final location and design of a proposed project.
- Work closely with technical experts to see how we can use new technologies to improve our management of bushfire safety risks.
- Complete an Environmental Impact Statement that includes a bushfire hazard and impact assessment. This assessment will inform the design and provides further information on how we will manage risks.

During construction we:

- Ensure that contractors have appropriate bushfire risk control measures in their processes.
- Ensure that during fire danger periods and total fire ban days that our hot work procedure is adhered to so as to minimise, or eliminate fire starts, during construction activities.

We operate and maintain the network to reduce risk of bushfires from electricity infrastructure

Our operating procedures and bushfire risk management plan detail how we operate and maintain assets and easements,

prior to, and during the bushfire season. Activities in reducing bushfire risks include:

- Operating the network in normal and abnormal situations to ensure continuity of electricity supply.
- Operating the network within technical limits.
- Inspecting our transmission network assets to identify defects using ground, climbing, and aerial (drones/helicopter and thermal imaging) techniques.
- Conducting regular vegetation inspection of our easements using LiDAR imaging and routine ground inspection to identify vegetation growing too close to transmission lines that could create a public safety or bushfire risk.
- Managing 'hazard trees' outside the easement that pose a danger to our network and/or community safety.
- Manage vegetation within the easement to maintain safety clearances. Tower and pole base areas have additional clearing for maintenance access and to reduce the risk of impact by fire.
- Prioritisation of asset maintenance works to enable appropriate response if there is an increased risk of catastrophic asset failure.

We work closely with stakeholders to mitigate the risks of bushfires

We work with stakeholders to identify and manage any safety risks to the community and responding emergency services both prior to and during bushfire events. This is achieved by:

- Engaging in fire preparedness activities that are jointly coordinated between the jurisdictional fire agencies, key government land managers, local government, utilities, national parks and other land managers.
- Participating in local bushfire management committee meetings.
- Acting as a liaison officer and work with government and emergency services to prepare responses to immediate threats, including in exceptional circumstances de-energising transmission lines.

We limit activities near assets and in easements to keep the community safe

Electricity can arc large distances or induce voltages into nearby structures. To minimise the risk to the community, we:

- Have easements over our network that allow us to safely construct, operate and maintain structures and electricity lines.
- Monitor and control certain activities within easements including tree heights, certain storage activities, building heights, plant and vehicle heights, building materials and certain recreation activities.

Restrictions about what you can and cannot do within Transgrid easements are captured in our Easement Guidelines that are available on our website.



Pictured: Transmission line with vegetation clearance.



Information for emergency services

If you are involved in fire management activities near Transmission assets, please familiarise yourself with the following information.

The Electricity Networks of Australia National Guidelines on Electrical Safety for Emergency Personnel (ENA DOC 008-2006) provides critical information related specifically to fire control near transmission lines. This includes special conditions that apply to the use of water in fire control activities. Please contact us if you have any queries regarding application of the guideline at our assets. If you are involved in fire management or control near transmission lines, please familiarise yourself with these guidelines and the recommended control measures. A full version of the industry guidelines may be purchased from www.saiglobal.com or by calling 131 242.

In accordance with the guideline important safety information for emergency services when firefighting and bushfire prevention activities includes:

- Live powerlines can arc to surfaces without warning under conditions of intense heat, smoke, flame and water vapour caused by fire and firefighting activities
- Wood pole structures may fail causing wires to fall.
- Sagging wires may occur due to failures or high temperatures.
- Do not directly attack fires in cleared areas beneath lines.
- Do not spray water on or near wires or insulators from ground or air.
- Wait for fire to burn clear of the cleared areas beneath lines before commencing a mop up operation.
- At all times treat the line as live until clearance has been given by Transgrid personnel ON SITE.
- At all times keep personnel and vehicles a minimum of 25m clear of either a head fire, or a flank fire burning under or within 25m of the powerlines (see following Figure illustrating a firefighting operation).

- When near or underneath powerlines undertaking mop-up activities maintain at least 25m to the fire edge. Mop-up may include the knockdown of low (less than 2m high) isolated flames/spots/smouldering logs which are not producing a convection column or heavy smoke plume. In such cases:
 - Never direct the hose stream into the power line.
 - Never direct the hose stream into a smoke plume that is near (less than 25 m from) or reaching power lines. Keep stream no higher than a person's head height.
 - Never direct the hose stream at a burning bush or tree (more than head height) in a power line easement.
- Bushes and trees burning in power line easements present a real threat of creating a flashover to earth from wires – KEEP AT LEAST 25m CLEAR
- When crossing power line easements, ensure there is adequate clearance between the highest point of the vehicle (including aerials) and the power lines, avoiding areas with tall vegetation under lines.
- Do not enter substations, await the arrival of Transgrid personnel who will advise if it is safe to do so.

In addition to the guideline, Transgrid specific safety information for emergency services when fighting bushfires includes:

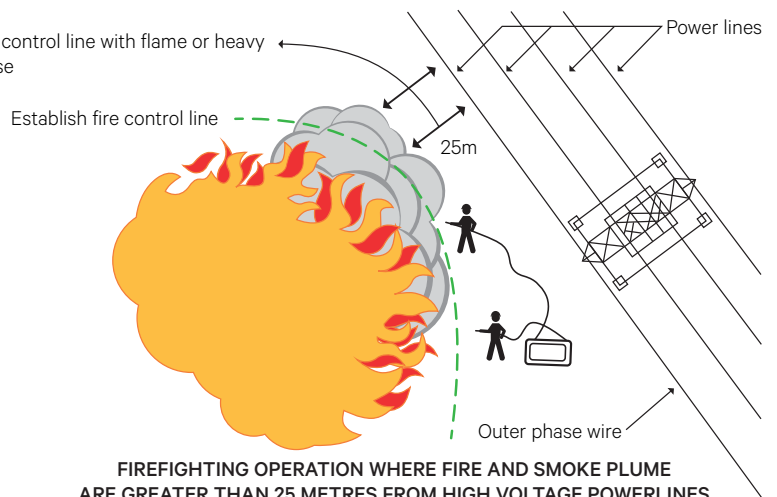
- Any firefighting or fuel reduction activities to be carried out in the vicinity of Transgrid powerlines shall be in consultation with Transgrid. Where fire control active are still considered necessary from the cleared areas under lines, early advice to Transgrid will allow an assessment of risks associated with de-energising the line.
- Emergency services may 'water bomb' on/around transmission lines – please keep us informed of these activities as they may impact the longer-term performance of the network
- Machinery shall be limited to 4.3m in height when on an easement.

If you see a fire at or near a Transgrid transmission line

If you see a fire burning underneath or near a transmission line and property or lives are at risk, ring emergency services immediately by calling Triple Zero (000).

For more information about fire safety, preparedness and management, please visit your local fire services authority website.

25 metres or greater from outer phase to control line with flame or heavy smoke plume not yet reaching outer phase





How can you assist?

Reporting Issues

You can help to minimise bushfire risk by reporting issues such as those listed below. Try to identify the operator (normally by a sign on or near the asset) of the assets and call the relevant emergency number:

- Fallen powerlines – remember stand clear of fallen powerlines as these can induce dangerous voltages many metres from the conductor.
- Damaged power poles or tower structures.
- Vegetation that is close to touching and/or leaning towards powerlines.
- Fires near transmission lines.

For Transgrid assets, refer to the contact number at the end of this fact sheet.

Being Powerline Aware

Whenever undertaking activities near powerlines, follow these guidelines:

- In the event of a fire adjacent to powerlines maintain at least 25 metres clear of the powerlines and/or fire fronts as smoke and water spray can result in the powerline arcing to ground.
- Do not operate any equipment that has the potential to contact, or get near, powerlines without notifying the operating utility.

- In the event of a bush fire you may encounter fallen and or sagging powerlines across roads or other access routes from your residence. Please factor this into your bush fire emergency plan.
- If in doubt about the hazards and dangers, call the general enquiry number below.

Managing Vegetation on Property

Consider the location of powerlines on or adjacent to your property or business:

- Avoid planting vegetation that may grow near, or come into contact with, powerlines. High voltages can arc large distances or induce voltages into nearby structures.
- Take particular care when removing trees or large branches at the edges of the easement to ensure they do not fall dangerously close to the powerlines.



For more information please visit our [website page on Living and working near transmission lines](#).

Connect with us

Transgrid is committed to working with landowners and communities as we deliver on the Government's energy transition. We want to find solutions that work for everyone. Please contact us for more information.



Contact details

Emergencies 1800 027 253
General Enquiries 02 9284 3000

Community Enquiries 1800 222 537
Our business hours are 8:30am – 5:00pm

Find out more at:
[Transgrid.com.au](https://www.transgrid.com.au)

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