POWERLINK QUEENSLAND

ACTIVITIES ON AN EASEMENT

Information on activities that can and can’t be carried out on, or near, Powerlink easements to ensure the safe and reliable operation of the network.
An easement gives Powerlink Queensland a legal right to access land and carry out work to build, operate and maintain our network, and to regulate certain activities on the easement area.

The landholder continues to retain all other rights and responsibilities of ownership, including land management and other general land maintenance activities on their property.

Many activities can continue as normal, however for your safety and the security of electricity supply, there are some activities that are not allowed on, or near, Powerlink easements.

Protecting you and the network

There are rules around activities you can and can’t do on, and around, a Powerlink easement. Some of these rules are set out in the registered easement conditions which are noted on the property’s title. These specifically set out the rights of both the landholder and Powerlink.

In addition to these registered conditions, there are also other guidelines and rules that are based on:

- safety to the public or to Powerlink employees and contractors
- the risk of damage to property
- the safe operation of the overhead transmission line, underground cable or other assets
- access to the line or associated infrastructure for any future works, including maintenance, upgrading or renewal activities.

Generally, many activities can continue as normal on, or near, an easement. However you always need to be aware of the environment around you when on an easement.

If you, anything you are carrying, or equipment you are using comes into close proximity of overhead transmission conductors (wires), there is a high risk of serious injury or fatal electric shock. Electricity can jump across an air gap and create a conductive path. This is known as a ‘flashover’, which can occur between wires or from wires to the ground, and can be seen as a flash or heard as a loud ‘crack’.
Keep a safe distance

All Powerlink infrastructure should be regarded as ‘electrically live’ and therefore potentially dangerous at all times. We strongly encourage you to contact Powerlink before operating any plant or equipment on a transmission easement.

Exclusion zones that apply to untrained persons are defined in Schedule 2 of the Electrical Safety Regulation 2013. The regulations define exclusion zones for untrained persons in charge of operating plant or equipment in the vicinity of electrical facilities. Different exclusion zones apply for transmission lines of different voltages.

If there is any doubt that the plant or equipment you are operating will meet the prescribed clearance distances from the conductors, you are obliged under the Electrical Safety Regulation 2013 to seek advice from Powerlink.

Consider wire movement

Our easements are designed to accommodate the fact that wires can move about. Transmission line wires move vertically (sag) under changing load and temperature conditions, and can move horizontally (sideways) in cross winds.

Please be aware of wire movement when planning any activities on an easement, and contact Powerlink for a detailed assessment if necessary. Generally, any planned above-ground activity in excess of 3.5m in height, like moving a high load under the wires across a Powerlink corridor, should be referred to Powerlink for comment and advice.

Keep the working area clear

A working area for maintenance activities of at least 20m from the outside extent of a tower’s footing (including foundations and anchor cables), and 5m either side of the Conductor Shadow Area (CSA) – the area on the ground directly below and between the overhead wires – needs to be kept clear of obstructions at all times.

For more details regarding clearance areas around our infrastructure, please view a copy of our ‘Management of Easement Co-use Requests Guideline’ (referenced on page 6 of this brochure).

An illustration depicting the CSA is shown below:

Ask before you act

If you are planning to undertake any work on or near a transmission line easement that is likely to require our written consent, you will need to complete and submit an ‘Application for the Co-use of a Powerlink Easement’ form which can be done online or alternatively by completing Annexure C of the ‘Management of Easement Co-use Requests Guideline’ (referenced on page 6 of this brochure).

We will need:

- A plan clearly locating your proposal in relation to the property boundary, and if possible, the easement boundary.
- A map of the property showing main access roads and the position of any towers on the property.
- A copy of the Certificate of Title or the Real Property Description (RPD) of your allotment, which you will find on your council rates notice.

If you have any doubts about what you can or can’t do, ask us first.

Also, if Powerlink has not consented to the presence of an existing structure on an easement, please contact us so we can assess any potential safety risks.
What can you do on an easement?

✅ Generally permitted

Activities that are generally permitted on an easement without written approval include:

- Agricultural activities, such as grazing or production of low growing crops (less than 3.5m high), although approval may be necessary for operating equipment.

A clearance area of 20m around towers and 5m either side of the Conductor Shadow Area (CSA) needs to be maintained for some on-easement activities.

- Operating mobile equipment such as tractors – providing they comply with the required safety clearance distance and are not carrying out on-easement work (pages 5 and 6 describe on-easement work that requires written permission, and on-easement work that is not allowed).

- Recreational activities such as walking and driving. This does not include using kites, flying model aircraft or other activities which could breach safety clearances.

- Constructing small (that is, less than 24m² floor area and less than 2.5m high) temporary or easily removable non-habitable structures, such as a garden shed or picnic table – ensuring they are at least 20m from any tower or pole, and more than 5m outside the CSA.
Activities that may be permitted on an easement, although they require written approval and may be subject to certain conditions, include:

- Burning off or lighting fires.
- Quarrying, excavating, ploughing, filling and any general ground disturbance works.
- Erecting electric or metallic fencing.
- Planting trees whose mature height will exceed 3.5m. Installing a swimming pool on the easement or within 35m of a transmission tower.
Activities which are not allowed on an easement include:

- Constructing houses or habitable structures and other substantial structures.
- Placing garbage, refuse, fallen timber or any flammable material on the easement.
- Placing an obstruction – for example, the installation of a small shed (less than 24m² floor area and 2.5m in height) within 20m of a transmission tower or supporting structure, or within 5m of the CSA.
- Operating mobile plant such as a tractor that breaches the overhead statutory clearance distances.
- Undertaking any activity that may intrude upon the regulated safety exclusion zone.
- Climbing a transmission tower.

The activities outlined are examples only and are not an exhaustive list. If you are planning an activity on an easement, we suggest you download a copy of our ‘Management of Easement Co-use Requests Guideline’ document, which provides a guide to activities that can or can’t safely take place on our easements.
Safe farming activities on or near easements

Harvesting and grazing
Reasonable modifications that are practical and cost-effective may be made during the transmission line design process, such as increasing the height of the transmission conductors (wires) to help reduce the impact a new transmission line has on farming practices. Grazing near or on easements is generally permitted as long as relevant safety clearances are observed. Please ask us how to safely operate equipment prior to working in the vicinity of a transmission line.

Aerial operations
Your safety when undertaking aerial operations such as spraying, crop dusting, fertilising or mustering around transmission lines is essential. Please contact us about your aerial operations and ask us how to safely achieve maximum crop coverage with your aerial operator.

Irrigation systems
Some common types of irrigation systems can be used quite safely, however certain types can be dangerous on a transmission line easement. The water from stream gun irrigators must not make direct contact with transmission line poles or towers and should not intrude on exclusion distances from the conductors or any live parts. It is important to discuss your irrigation system with Powerlink so that a proper safety assessment can be made.

It is also important you take particular care when moving, assembling or disassembling irrigators. Pipes or long metal parts must be carried in a horizontal position and as low to the ground as is practical. Remember, transmission lines carry electricity at very high voltages and contact does not need to be made with the wires for a flashover to take place (a flashover occurs when electricity jumps across an air gap to create a conductive path to earth).

Biosecurity management
Powerlink understands biosecurity management is a high priority for landholders and the community, and we take biosecurity matters very seriously. We work closely with landholders and farmers to control the introduction or spread of identified weeds, pests or pathogens on easements and access tracks.

Powerlink’s biosecurity management practices comply with the Biosecurity Act 2014. Typical practices include ensuring that vehicles used, and clothing and footwear worn by Powerlink staff and any of our representatives, are clean when entering infestation-free zones.

Access tracks
For the security of electricity supply it’s important that we can easily access our transmission lines at all times, especially in the case of an unexpected electrical fault on the network.

We use existing roads and tracks wherever possible for vehicle access to our easements. At times we may need to upgrade existing tracks or construct new ones, and we’ll consult with you about the most appropriate actions and locations if this is required.

Fire management
Fires burning underneath or near our transmission lines can endanger people, animals and property, and have the potential to interrupt electricity supply to customers. Please seek Powerlink’s advice and approval as early as possible before undertaking any activity involving fire near our transmission lines and easements.

If you see a fire burning underneath or near a transmission line, please report it to us as soon as possible on our 24-hour emergency number FREECALL 1800 353 031. If people or properties are at risk please call emergency services immediately on 000.
About Powerlink Queensland

Powerlink owns, develops, operates and maintains the high voltage electricity transmission network in Queensland. Powerlink’s network extends 1,700km from north of Cairns to the New South Wales border.

Powerlink’s transmission network transports electricity generated at large power stations to the distribution networks owned by Energex, Ergon Energy and Essential Energy (in northern New South Wales). Powerlink also transports electricity directly to high usage Queensland customers, such as aluminum smelters, and to New South Wales via the Queensland/NSW Interconnector transmission line.