

# Operational Works in an Easement – Underground

19 February 2019



Part of the Energy Queensland Group

Under the [Planning Regulation 2017](#), we are triggered as a Referral Agency if a development application involves operational works that are *'filling or excavation where the works are located completely or partly in the easement'*.



## Operational works (excavation and filling)

Significant safety risks exist when working near electrical infrastructure. Operational works in and around electrical easements can affect the controlled environment provided by easements.

Transmission and distribution powerlines in our easements feed the network with electricity, so they are essential to maintaining supply to our customers. The above referral trigger helps us protect our electrical infrastructure in easements from development and ensure community safety and a reliable power supply.

Given the importance of transmission and distribution powerlines, we consider operational works in or near our easements to be high risk. There is always a need to assess whether the works will impact on the safe operation of the powerlines or on community safety.

## Operational works (excavation and filling) on transmission or distribution underground easements

Excavation and/or filling works can negatively impact powerlines. There are a number of things to consider when undertaking works within transmission or distribution easements which contain underground electrical assets:



Transmission and distribution powerlines form the backbone of the electricity network, providing the connection between power generation and customers.

This integral role means their efficient and reliable operation must be maintained by us to ensure customer needs are met.

Powerlines are usually located either within the road reserve, or on easements and way leaves. This allows us to protect and control any potential impacts from development in and around our assets.

Referral of civil works applications enables early assessment of any potential impacts from development. It also minimises delays in the development process due to the late realisation of easement conditions by developers.



### 1. Filling over underground cables

The underground power network is designed for existing operating conditions that directly impact on cable operating capacity, performance and life span. Changing the depth and type of coverage over cables has the potential to reduce their operating capability, and cause cable failure and/or premature aging. This incurs additional operating costs, as the cables will need to be replaced.

### 2. Excavating near underground cables

Undertaking excavation works without accurately identifying underground cables and taking necessary precautions to protect them can be very dangerous to the persons completing the works. It can also result in network faults/failures.

### 3. Access to infrastructure

Access to and along easements must be available to our personnel at all times for maintenance and emergency purposes. Excessive filling and/or excavation works within an easement can limit access to our construction and maintenance crews and their vehicles/equipment and is not permitted.

### 4. Drainage

Excavation or filling works can alter the flow and drainage of stormwater within an easement. This can reduce the cover provided to underground powerlines and restrict access to and through an easement. It also hinders our ability to operate and maintain the network, and attend to emergency situations in a safe and controlled environment. Operational works outside of an easement must ensure that the existing drainage conditions are not degraded.

## Contact us

For more information about our Referral Agency contact us or visit our website at:

- [www.energex.com.au/referralagency](http://www.energex.com.au/referralagency)
- 13 12 53 (8am to 5:30pm, Monday to Friday)
- [townplanning@energex.com.au](mailto:townplanning@energex.com.au)

And, for more information about working safely near powerlines, please see our [working safely near powerlines information](#).



Excavating in and around underground network cables without including the appropriate management actions increases the risk of exposing or damaging the electrical asset. This is a significant safety risk to those undertaking the work, and also can impact the reliable supply to our customers. It can also cause delays in re-establishing the connection within the network and repairing the asset. An assessment must be completed and any construction safety measures implemented before we will accept work near our underground assets.



Filling works over underground cables can reduce the operating capacity and increase faults. This can also impact other assets within the network and subsequently incur additional maintenance and upgrade costs. Prior to the works starting, a cable rating assessment must be done to identify the operating limits of underground assets and ensures the network capital expenditure is spent appropriately.

