

Safe distances

Working safely around our networks

Overhead and underground



Presenters

Zoe Meuli : HSE Business Partner
Taranaki & Whanganui regions

Dean Stevenson : Senior Operations Specialist
Network Operation Centre (NOC)

We bring electricity and gas to 1.1 million customers across the North Island

There's a lot that goes into bringing light and heat to your home or business. We're proud to play an important part thanks to the lines, cables and pipes we own.

*based on FY19 figures

Our part in bringing energy to you

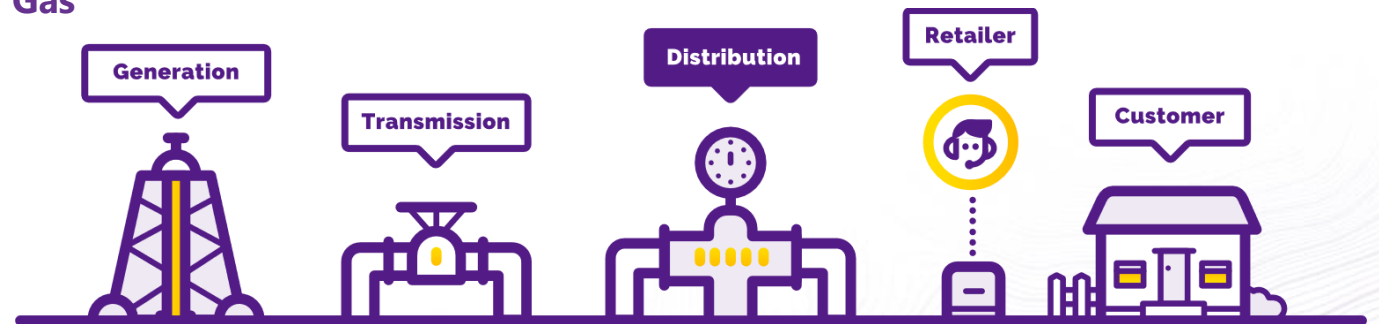
Energy is generated by power stations, then sent along transmission networks operated by Transpower (for electricity) and First Gas (for gas) to distributors like us.

We own and maintain the local lines, cables and pipes that deliver power to the people and businesses who use it. You pay your retailer for the energy you use, and some of what you pay comes to us so we can continue to invest in our network to ensure your power supply is safe and resilient.

Electricity



Gas



Our gas network

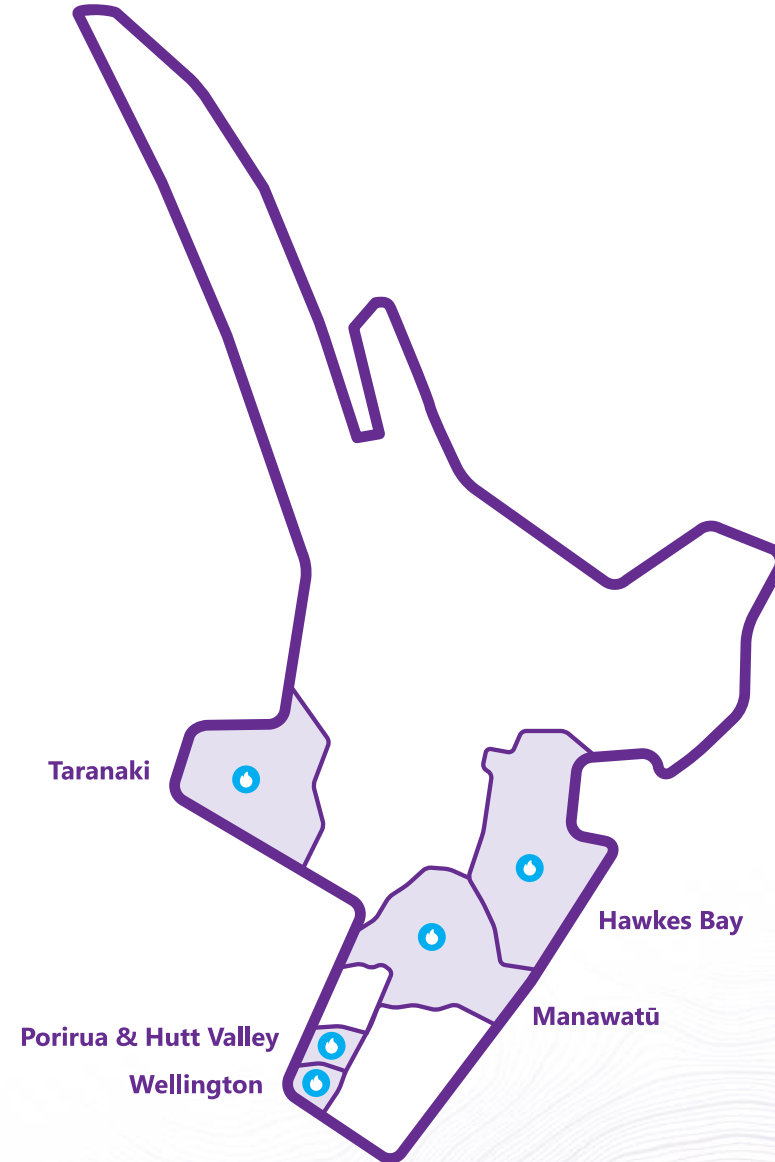
Powerco is New Zealand's largest gas distribution utility. Our gas pipeline networks are in Taranaki, Hutt Valley, Porirua, Wellington, Horowhenua, Manawatu and Hawke's Bay.

6,100

Kilometres of pipes make up our network

112,000

Homes, businesses and industries connected to us



Our electricity network

Powerco is New Zealand's largest electricity utility by the area we serve. Our electricity networks are in Western Bay of Plenty, Thames, Coromandel, Eastern and Southern Waikato, Taranaki, Whanganui, Rangitikei, Manawatū and Wairarapa.

28,441

Kilometres of lines and cables covered by our network.

344,000

Homes, businesses and industries connected to us.



Look up! Beware of overhead power lines

The Troy Hall story

Bay of Plenty orchard worker Troy Hall survived two electric shocks after getting too close to overhead lines while working.

Watch his story about respecting the power of electricity.



Troy Hall
Avocado Harvester, Aroharvest

NZEC P 34 – What is it?

The NZ Electrical Code of Practice – a legislative requirement under the Electricity Act, focused on electrical safe distances and keeping people safe.

Information and guidance relating to:

- Ground clearances for overhead power lines
- Excavation and construction around overhead lines and supports
- Operation of mobile machinery near conductors/lines (close approach consents)
- A range of other clearances (telcom, electrical switchyards, etc)



Key points of the code

- Ensure structures remain well clear of overhead lines
- Consider the risk of encroaching on safe distances when engaging contractors (roofing, scaffolding, sign installers, etc.)
- Consider how maintenance providers will complete tasks on buildings or structures
- Minimum approach distances are clearly set out in the code and will vary dependent on the voltage (kV) and type of line
- Councils do not enforce these rules as part of the building process or compliance sign off

Building near power lines

If constructing a building near power lines, **NZECP:34 – Electrical Safe Distances** sets out minimum distances required between the building or structure and overhead power lines.



Digging? Know what's below

- Laying or constructing underground assets – drainage, ducting, etc
- Working on roads – lowering, digging out or widening
- Inserting pegs or waratahs
- Contact beforeUdig.co.nz, a free service that will send you plans of where underground cables and pipes are located
- Review the plans and use a professional locate service to mark out if utilities are identified
- ALWAYS hand dig (pothole) to expose pipes and cables – don't use a digger
- REMEMBER – Plan, prepare, pothole, protect, proceed



November is...

Safe Digging Month

- A collaboration between partners BeforeUDig and NZ electricity, gas, fibre and other utility companies
- Promotes safe digging and the importance of knowing what's below before working
- The following video has been produced by BeforeUDig, financially supported by Powerco and other utility companies throughout the country



SAFE DIGGING MONTH



Proudly Supported By





What we see

Areas of greatest concern for us:

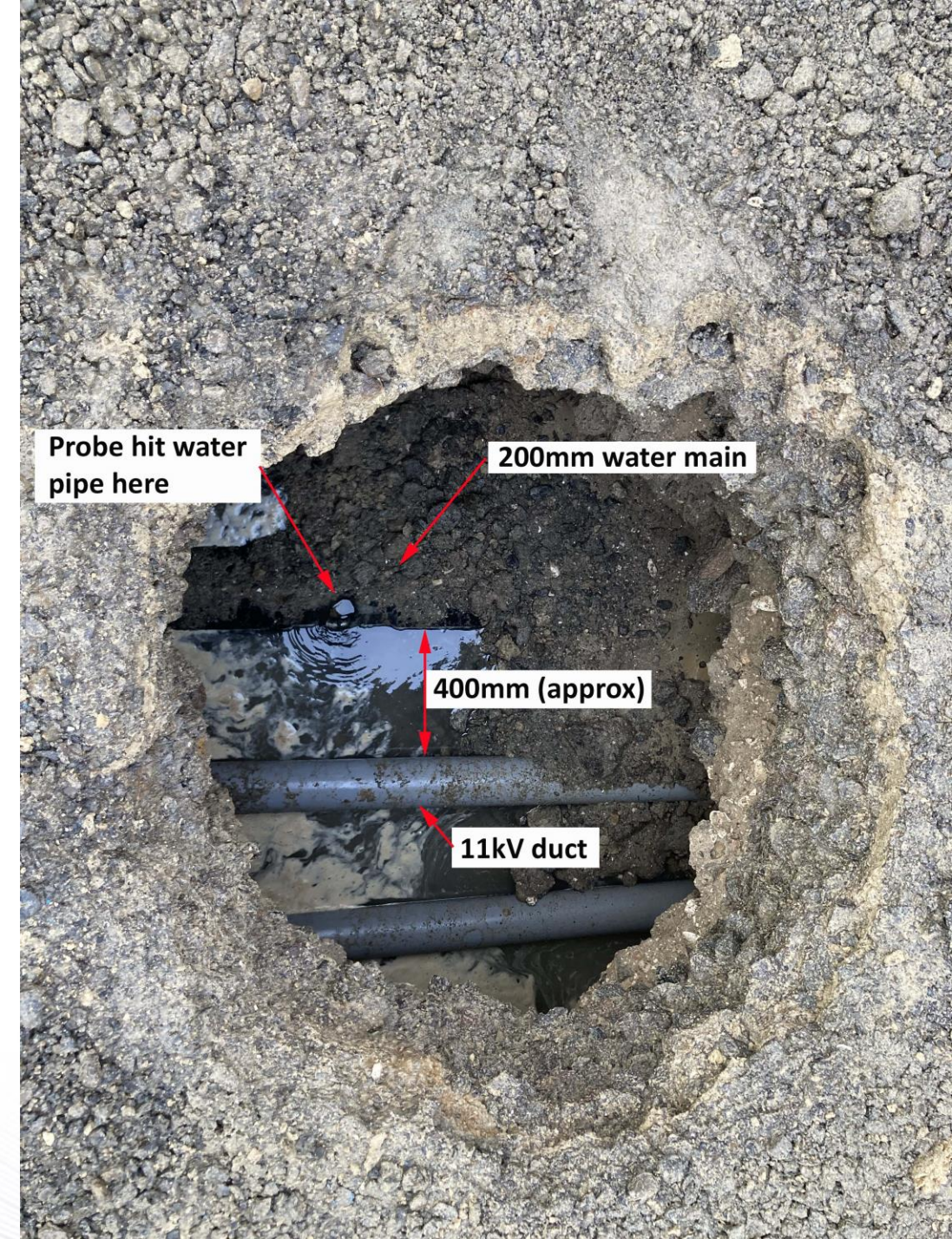
- Excavating near power poles, stays or ground-based equipment
- Erecting structures too close to power lines and poles
- Raising or lowering ground levels near overhead power equipment
- Use of mobile plant near lines



What we see

Areas of greatest concern:

- Cables hit with waratahs
- Live high voltage cables exposed through excavating
- Cuttings and batters close to high voltage equipment and structures – access to work around these safely is required
- If you expose a cable not on the plans stop what you're doing and seek guidance in identifying the cable or duct



Close Approach Consent

Permission for people other than Powerco approved contractors to work within the minimum safe distances of our network

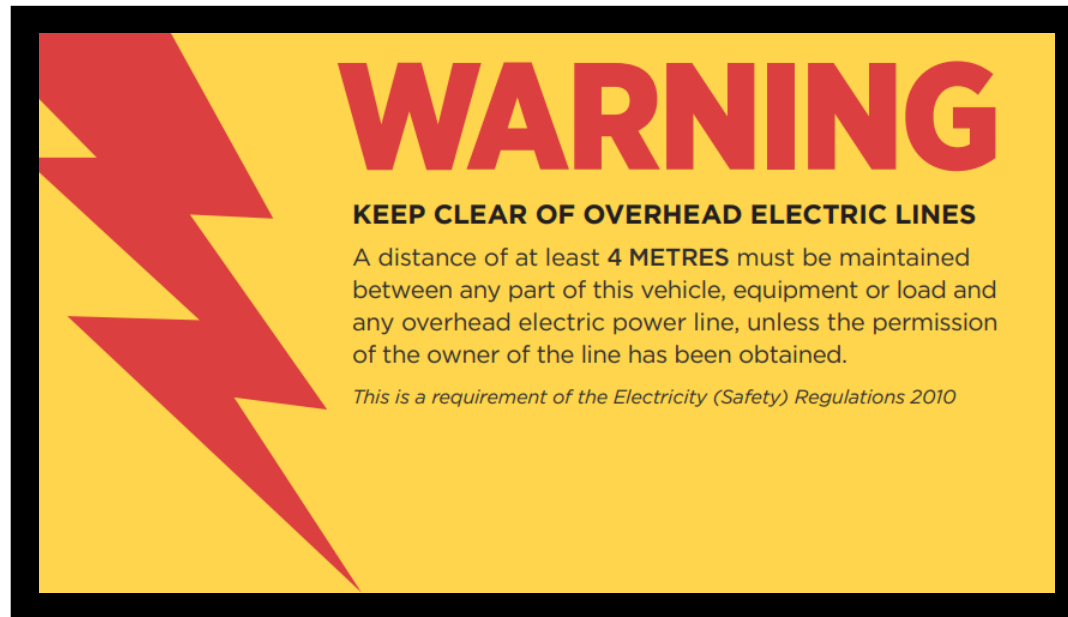
- Only related to work that is taking place near Powerco assets, eg tree trimming, excavating, lifting or placement of loads, etc
- Consent form found on Powerco's website – [powerco.co.nz](https://www.powerco.co.nz)

IMPORTANT: A Close Approach Consent does not denote approval of the design and positioning of any permanent structure in relation to the lines



Close Approach Consent

[Apply online](#) for a Close Approach Consent if you plan to carry out any of the following:



- Working within 4m of overhead power lines.
- Digging within 5m of any electrical or gas asset (pole, switch, transformer, cables and gas lines).
- Digging near important underground power cables. These are marked 'strategic' on plans and include 11kV (and above) cables and located within 1km of a zone substation.
- Trimming or felling trees near power lines.
- The online application is for an appointment for our contractor to meet customer's contractor on site. Our contractor will assess the work being done and issue a permit while on site.

Online safety resources – powerco.co.nz/safety

We have electricity and gas public safety resources, including minimum safe distances, on our website and worksafe.govt.nz

Working together to stay safe

We want everyone who lives and works near our networks to be safe. Whether you use electricity, gas or both it's important to be aware of the overhead lines above you, and the cables and pipes underground so you can keep clear of them and avoid being harmed. Make sure you know what to do in an emergency, and if you see anything you're concerned about let us know.



Electricity safety

Taking care of the electricity assets on your property, trimming trees and building near lines.

[Learn more](#)



Gas safety

Taking care of your gas assets and what to do if you smell gas.

[Learn more](#)



Safety around our networks

Keeping clear of overhead lines and underground cables and pipes.
Arranging temporary disconnections.

[Learn more](#)



Powerco assets on your property

How we work with you if we have gas or electricity equipment on your property.

[Learn more](#)

Emergency

If there's imminent danger, such as fallen lines or a gas leak, call us immediately (24/7).

What to do

Electricity

0800 27 27 27

Gas

0800 111 848

Thank you

powerco.co.nz