



**Best in Service**  
**Best in Safety**



**WEL Networks**

# Safety on our Network

0800 800 935 | [wel.co.nz](http://wel.co.nz)



# ABOUT WEL NETWORKS

WEL Networks has been serving the Waikato for 100 years, distributing power from the national grid, currently connecting over 160,000 people to electricity services through over 85,000 connection points.

We employ approximately 240 staff with a range of expertise; from Live Line Mechanics, Faults Technicians and Technical Planners, to in-house Health & Safety professionals, Financial Accountants and Human Resources.

At WEL Networks, the safety of our staff and our communities is our highest property.

Our commitment – ensure everyone makes it home safely, every day.

We do this by; having equipment and safety practices that are industry leading, engaging an award-winning field services team who are highly skilled in safety procedures, and working in our communities to educate people on safety around our electricity infrastructure.

## BEFORE STARTING WORK ON OR NEAR OUR NETWORK

Whether you're a commercial contractor or homeowner, it's important that you take the time to accurately locate power cables before you start any work on or

near our network. From cable location to transporting high loads, we need you to be safe around our network.

# YOUR LEGAL REQUIREMENTS

The WorkSafe Excavation Safety Good Practice Guideline has minimum safe work practices for carrying out any work near underground and overhead, power lines, communications lines, pipes and any other utility services. Other useful documents are WorkSafe's *Guide for Safety with Underground Services* and the NZUAG Guide.

All underground services must be located and confirmed, by way of industry recognised techniques including hand digging and hydrovacating, before any excavation can be carried out with machinery.

NZCEP 34:2001 Code of Practice for Electrical Safe Distances sets out minimum safe distance requirements for excavation and construction near overhead electric line supports, safe distance requirements between electric lines and buildings (and other structures ie signs, scaffolding) and safe distances for the operation of mobile plant near electric lines.

Scaffolding should not be erected within 4 metres of our overhead electric lines unless you obtain a close approach acknowledgment from us and a safety observer is appointed to oversee the work.

## **Other laws and regulations specifying safe working practices to be followed are:**

- Electricity Act 1992 and amendments
- Gas Act 1992 and amendments
- Health and Safety at Work Act, 2015
- NZCEP34:2001 Electrical Safe Distances
- Health and Safety in Employment (Pipeline) Regulations 1999
- Electricity Safety Regulations 2012

If we consider that anyone has breached any of the above laws and regulations we may refer the matter to WorkSafe for investigation.

WEL Networks is required to report notifiable events to WorkSafe.

# KEEPING YOU SAFE

**If you hit a cable or overhead power line there is a risk of:**

- fatal electrocution or critical injury
- flashover causing serious burns
- cable explosion
- fire; and
- loss of critical supply to other users including hospitals, medically dependant customers and businesses.

If an electricity cable is cut by an excavator, or contact is made with an overhead line, anyone touching the metal parts of the machine may receive an electric shock.

Electricity can also travel through the ground, or any metal object in contact with the ground, causing the neighbouring ground to become live.

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## NEED TO LOCATE CABLES?

Call **0800 248 344** or [beforeudig.co.nz](http://beforeudig.co.nz) to obtain reference maps that indicate the approximate location of WEL Networks cables.

## MOVING HIGH LOADS?

Any load above five metres passing under power lines, will require prior approval from WEL Networks. Call us on **0800 800 935** or visit [wel.co.nz](http://wel.co.nz)

## PLAN AHEAD

**As a guide you should allow:**

- up to two working days for on-site advice and Close Approach Consent
- up to five working days for High Load Consents
- two days for a disconnection

# KEEPING YOU SAFE NEAR CABLES

If there is any doubt as to where cables are located, stop work immediately and consult with WEL Networks.

Cables should be considered as live at all times. Do not use cables as hand or footholds to climb in or out of the trench, especially around cable joint positions.

## HOW TO DIG AROUND CABLES

Best practice hand digging, is to expose the cable using the spade parallel to the cable not at right angles. Hand-held power tools or excavators should not be used within 0.6 metres of any underground cable. When a cable has been exposed by 'pot holing', best practice is to then dig away from the exposed cable, not towards it with excavators.

Directional drilling or thrusting parallel to WEL's 11kV or 33kV cables shall be at

least 0.6 metres from the proven location of the cables. The cables must be marked out by a competent cable location technician, and trial holes by careful hand excavation must be undertaken prior to the commencement of the work to prove the cable is parallel to the drill shot.

Underground cables are normally laid in trenches between 300mm and 1 metre deep, but these levels may change over time through the activities of roading or landscape works.

If buried cables have been found to be too shallow, or if the plans or other information have proved to be inaccurate, WEL should be informed, preferably before the excavation is back-filled, to allow the cables to be re-laid at the correct depth and/or the cable records to be amended accordingly.

Cables uncovered in an excavation may need to be supported or protected. WEL must be contacted as soon as this situation arises. Any cables lying in the bottom of an excavation should be

protected by sandbags or appropriate nail free protection device. Precautions should be taken to prevent access to exposed cables by members of the public or unauthorised people.

Cables should not be moved under any circumstances. Moving live cables can cause them to fault and a fatality could result. If a cable needs to be moved, the request should be made to WEL, who will arrange for the cable to be made safe prior to their relocation.

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## EMERGENCY DIGGING

In the case of emergency works, every effort should be made to locate buried underground cables, prior to undertaking machine civil work. It should always be assumed that buried cables are present and as such excavation work should proceed with extreme caution by careful hand excavation. (Where plans are not available in an emergency situation, only excavation by hand should be carried out, until the location of any cable(s) has clearly been established.)



## BACKFILLING

Back-filling of any excavation where cables have been exposed should only proceed following advice from WEL. Fill containing items likely to damage the cables, such as large pieces of rock and hard-core or other sharp objects, shall not be used. Cables should be backfilled with fine material such as sand.

## CABLE DAMAGE

If a buried underground cable suffers damage, however slight, WEL must be informed immediately.

Arrangements must be made to keep the public well clear of the area until the damaged cable has been repaired or otherwise made safe.

## WHAT TO DO IN AN EMERGENCY

If you hit an overhead power line:

- Treat the cable or overhead line as live – stay at least 10 metres clear.
- Evacuate the immediate area.
- If you are in a machine, stay there.
- Leave damaged cables exposed for us to fix.
- Call WEL Networks immediately **0800 800 935**.
- If you are at serious risk from another hazard, such as fire, and must leave the machine, jump well clear. Do not touch metal surfaces or the machine and ground at the same time.
- In the event of an electric shock don't touch the person until you are certain the source of electricity has been removed **Call 111**.



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## CONTACT US

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