

Farm Safety 2023

GLENRAC – Farm Safety Forum

14 September 2023

Presenter: Chris Trutwein, Senior Safety Specialist



Our Vision, Purpose and Values

Our Vision

What we want to be

Empowering communities to share and use energy for a better tomorrow.

Our Purpose

What we stand for

To enable energy solutions that improve life.

Business Objectives

- Continuous improvements in safety culture and performance
- Operate at industry best practice for efficiency, delivering best value for customers
- Deliver real reductions in customers' distribution network charges
- Deliver a satisfactory Return on Capital Employed
- Reduce the environmental impact of Essential Energy where it is efficient to do so

Our Values

What we care about



Make safety
your own



Be easy to do
business with



Make every
dollar count



Be courageous,
Shape the future

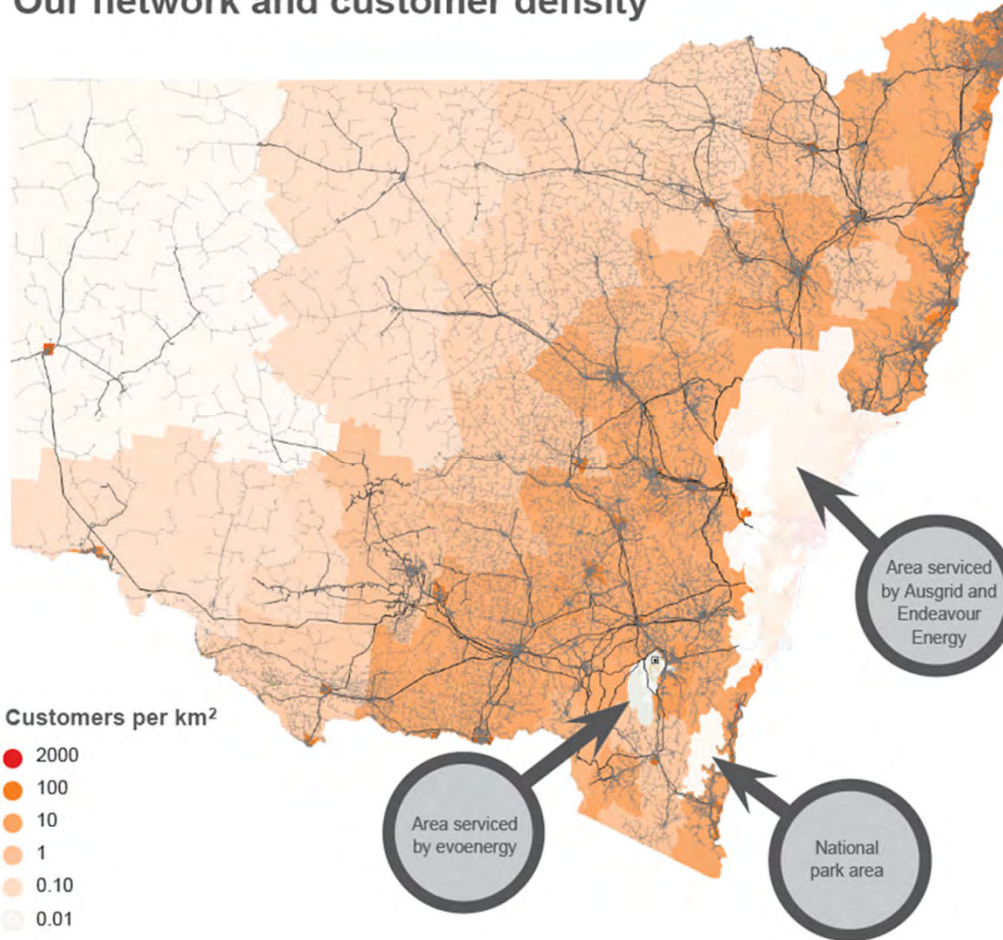


Be inclusive,
supportive and honest


We manage a large and diverse network

Keeping our customers safe around the electricity network is a key business priority.


Our network and customer density




> 880,000
 customers


4.8
 customers to fund every 1km of overhead powerlines, compared to Ausgrid with 43.7 & Endeavour with 33.9


737,000
 square kilometres of network covering 95% of New South Wales and parts of southern Queensland


1,404,814
 power poles - which equates to 1.6 power poles for every customer


183,099 km
 of overhead powerlines - equivalent to driving around Australia 13 times


364
 zone substations and 139,303 distribution substations

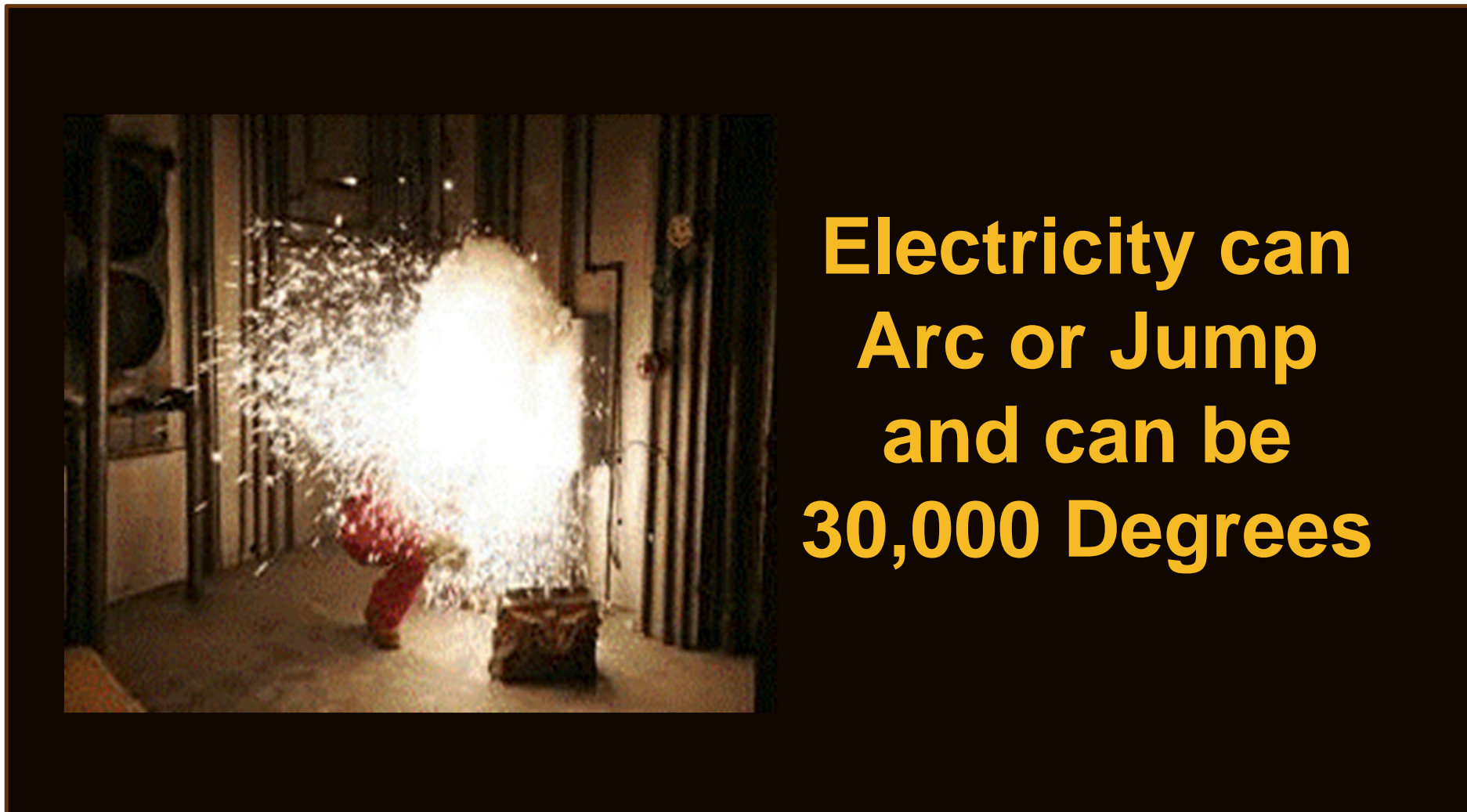
Working near overhead powerlines can kill you



Working near overhead powerlines



Working near overhead powerlines



**Electricity can
Arc or Jump
and can be
30,000 Degrees**

Working near overhead powerlines

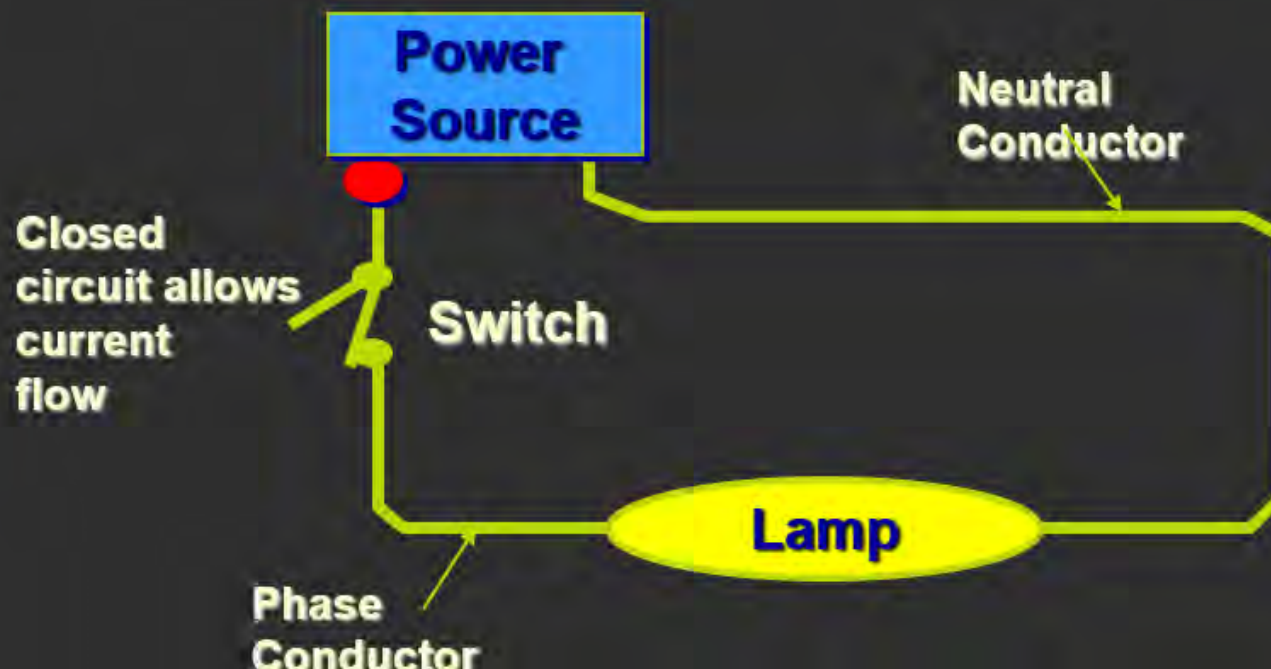


Potential Hazards

Basic Electrical Circuit

Three fundamental rules of electricity or electric current flow:

- Electric current will only flow in complete circuit.
- Electric current will always follow conducting path.
- Electric current will flow to ground if circuit path is created.



Working near overhead powerlines

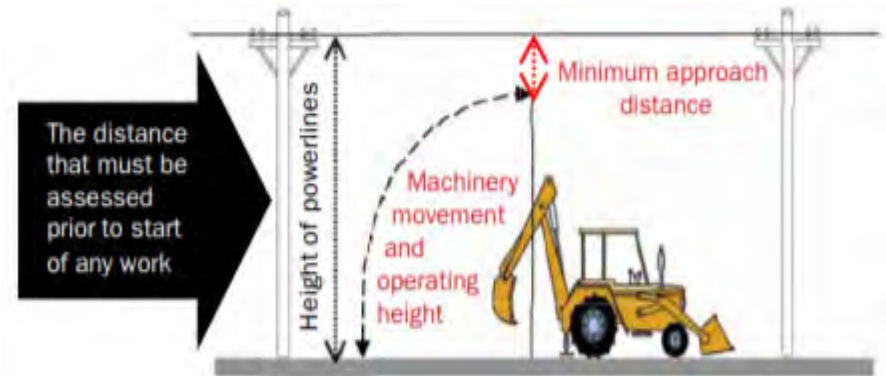
- > If planning work encroaching on or within 3m of powerlines, you **must** consult with Essential Energy for advice and controls that ensure the work activity is completed safely.
- > We provide a **free** obligation first site visit to discuss your proposed work.
- > Before you get onsite, plan and check the location of powerlines with the Look up and Live app.



Safe approach distances working near powerlines

Powerlines with voltages up to 132,000 volts	e.g. low voltage and high voltage distribution and subtransmission lines, usually on poles	3m
Between 132,000 and 330,000 volts	e.g. subtransmission and transmission lines on either poles or towers	6m
More than 330,000 volts	e.g. transmission lines usually on towers	8m

Table 3 - Safe approach distances when working near powerlines




Working near overhead powerlines








BA1

JANUARY 3 2022 - 12:00PM

Second man loses life after electrocution in Goulburn district


 Louise Thrower


Local News


      




A second man has died after being electrocuted on a Goulburn district property on Christmas eve.

Natural Looking Dentures 
 Denture Clinic
 ☎ 0246... [Show Number](#)

Virtual Office Support 
 Independent Office Support
 Goulburn
 ☎ 0404... [Show Number](#)

Goulburn Smash Repairs 
 Goulburn's number one
 smash repairer!
 ☎ 0248... [Show Number](#)

view  Need Insurance for your
 business?
**Contact View Insurance
 today →**

LOCAL NEWS

1 Salt sessions will bring many

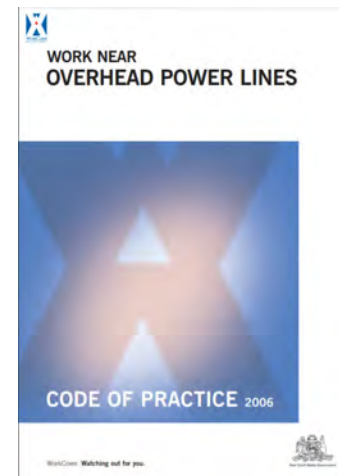


Working near powerlines

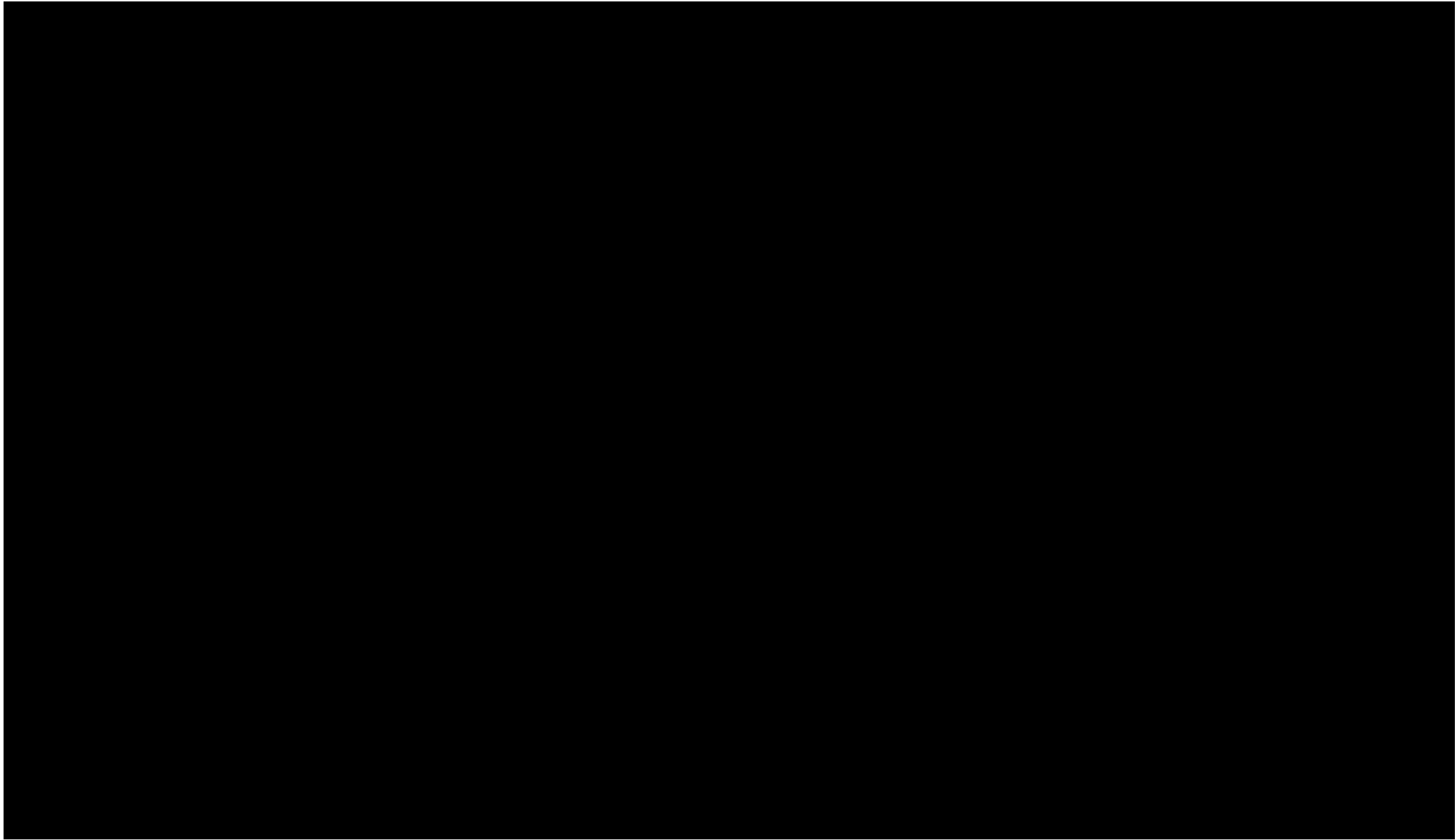
Farming and transport activities around powerlines could expose us to the risk of electrocution



Work near overhead powerlines **must** be undertaken in accordance with *SafeWork NSW Code of Practice – Work Near Overhead Powerlines*.



Risk: Lack of Awareness of Equipment Dimensions



Risk: Poor powerline visibility



Powerlines can blend into the working environment.
You **must know** the location of powerlines at your work site.

Risk: Lack of Awareness of Equipment Dimensions

In busy harvest and sowing seasons, distraction can be a factor in keeping safe.

It is important to:

- > Know the **height** of farm and transport machinery in raised and lowered positions and **always fully lower machinery** before moving off including tipper trucks and dog trailers.
- > Be **aware** that **weather conditions can affect the network** including causing powerlines to sag in hot weather or sway in high winds.



BA0

Potential Hazards

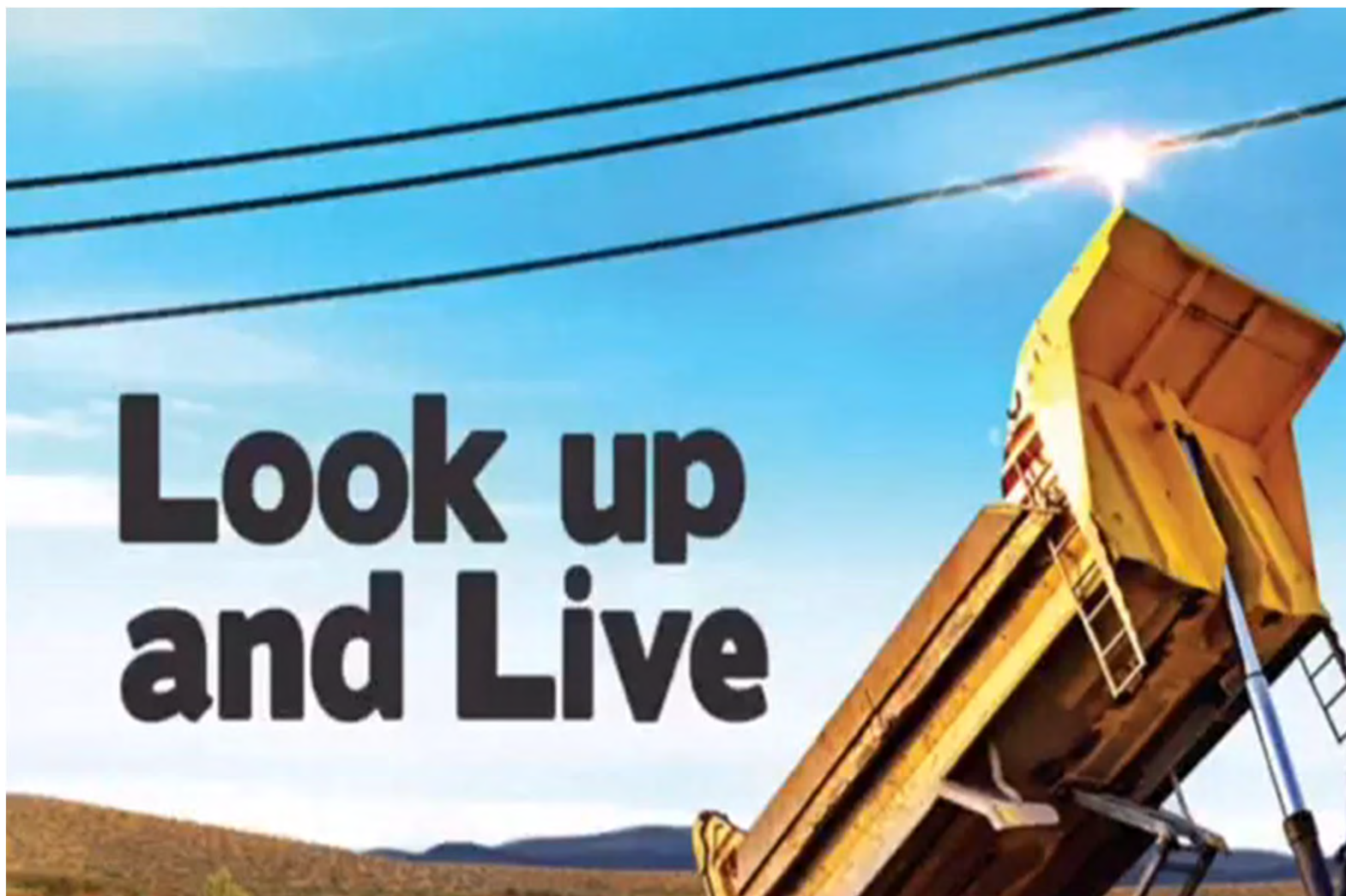


Step and touch potential



Working near powerlines

Farming and transport activities around powerlines could expose you to the risk of electrocution



Risk: Not Understanding Vehicle Exit Procedure

If a vehicle or machinery contacts the network, not understanding the correct exit procedure and precautions could result in injury or death.

WHAT TO DO IF YOUR HARVESTER BRINGS DOWN POWERLINES 

1 STAY in the vehicle **CALL** 000 **WAIT** for Essential Energy's all clear

2 If there's an immediate danger, like fire, and evacuation is **ABSOLUTELY necessary**, assess your escape route and check for fallen powerlines.

3 Exit the harvester by jumping - make sure to land with **both feet together**.

4 When jumping, **don't touch the harvester and the ground at the same time**.

5 Once you've landed with both feet together (be careful not to stumble or fall), shuffle with your feet together away from the harvester.

6 Move in this way until you are at least **8 metres** away from the harvester. **Do not go back.**



Our Key Communications Initiatives



Encourage
planning

Download the
free 'Look Up
and Live app'



Improve
powerline
visibility.

Encourage
aerial markers
& attend Field
Days across
NSW



Improve recall
of safety
messages
via paid
campaigns

Look up and Live

Look up and Live is a key safety message promoted in our campaigns to help customers to remember and to Look Up.

It's also a downloadable app that can assist farmers to safely plan their work around the network by providing:

- Overhead powerline locations and imagery on interactive geospatial map
- Powerline safety guidelines, including powerline exclusion zones
- Options for planning or performing work e.g. powerline visual indicators
- Information on de-energisation or relocation of powerlines.

Look up and Live

Download on the App Store

GET IT ON Google Play

A new era for safety: Digital mapping app now live!

essential energy

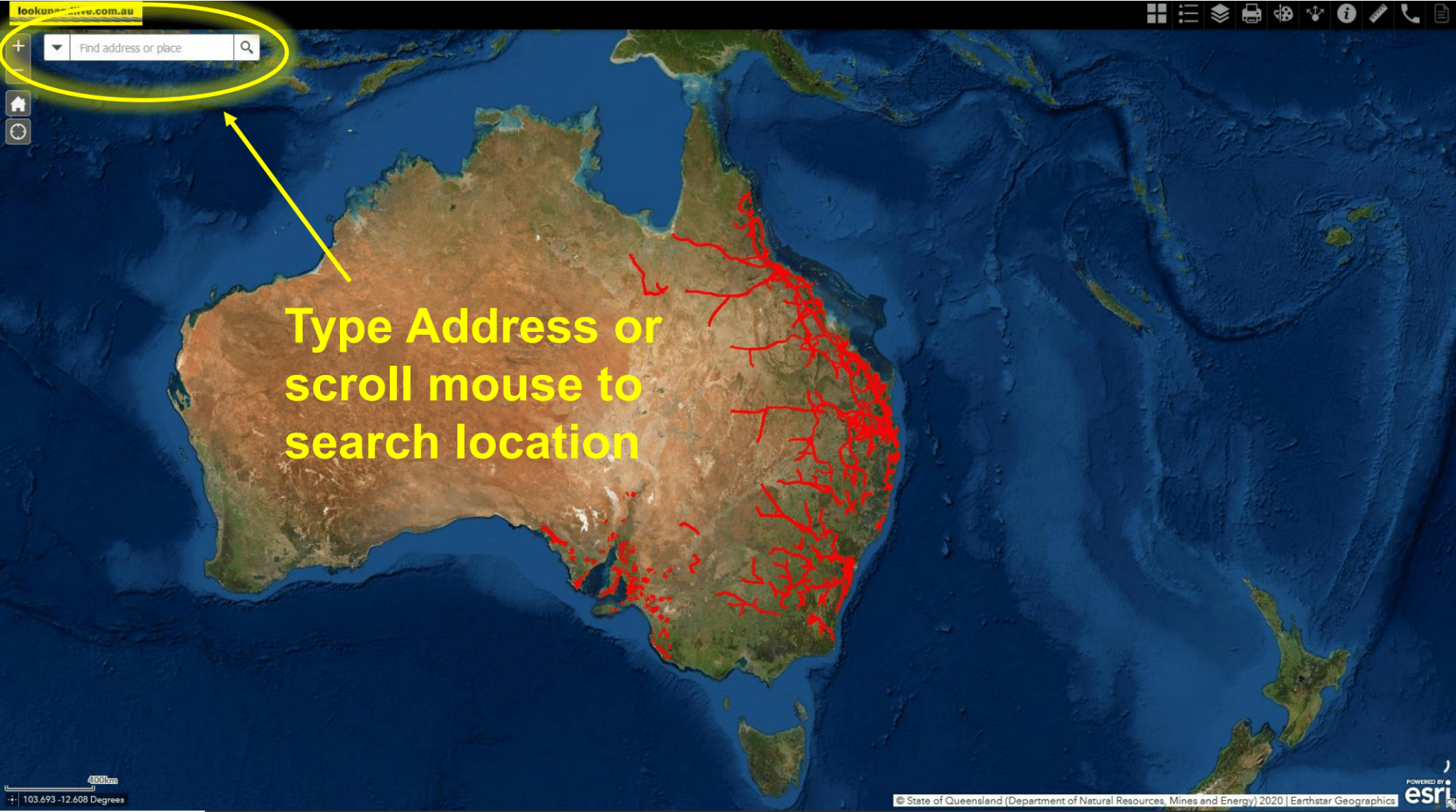
This banner features a yellow background with the text 'Look up and Live' in large, bold, black letters. Below the text are two black buttons with white icons and text: 'Download on the App Store' and 'GET IT ON Google Play'. At the bottom, there is a white section with the text 'A new era for safety: Digital mapping app now live!' and the 'essential energy' logo.

Plan ahead with the new Look up and Live app

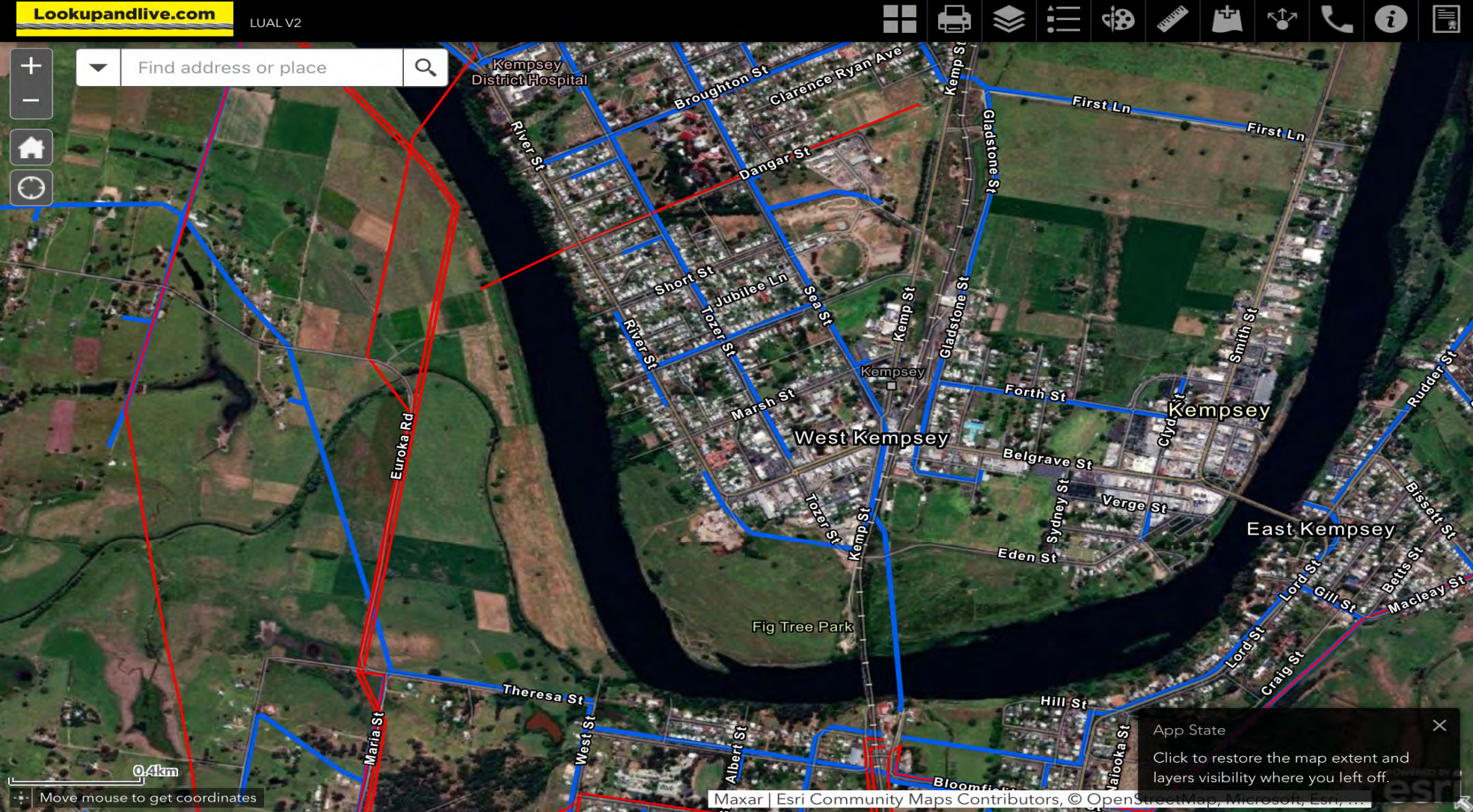
This graphic shows a hand holding a smartphone displaying a map with a red warning icon. The background is a stylized orange and yellow landscape with powerline poles and wires.



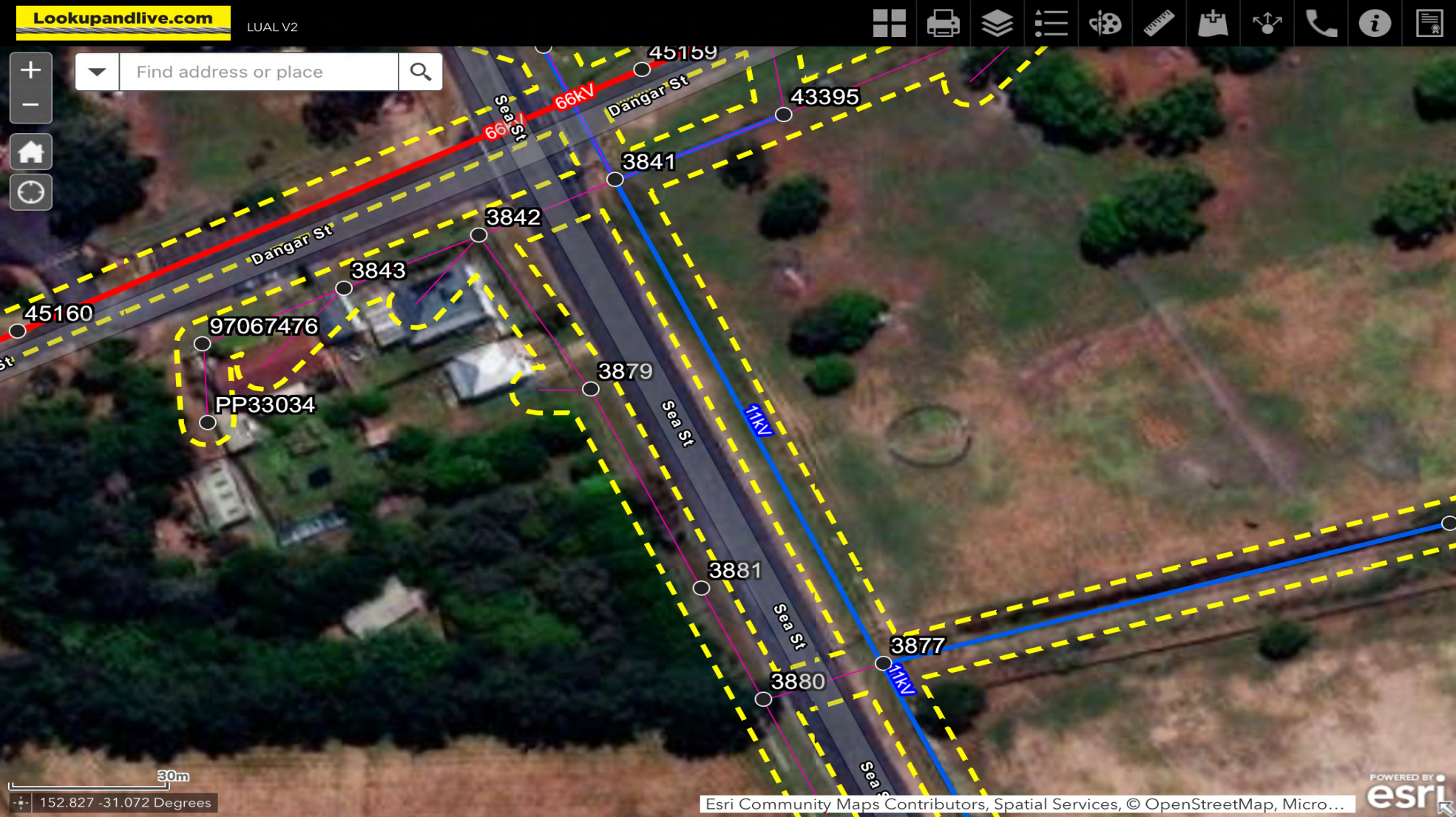
Look up and Live



Look up and Live



Look up and Live



Look up and Live

The screenshot displays the 'Lookupandlive.com' web application interface. At the top left, the URL 'Lookupandlive.com' and version 'LUAL V2' are visible. A search bar contains the text 'Find address or pla...'. The main map area shows an aerial view with a red line representing a 66kV power line running along Dangar St. A blue line represents another power line running horizontally across the map. A popup window is open over the red line, displaying the following information:

TR_Essential: 66kV-OH

Span Type: 66kV

Essential Energy Links

- [Request Safety Advice Form](#)
- [Aerial Marker Program](#)
- [NSW Work Near Overhead Powerlines Code of Practice](#)
- [High Load Information Sheet](#)
- [DBYD Enquiry](#)

The popup also features the Essential Energy logo and a 'Zoom to' button. The map includes various street names such as Dangar St, Sea St, Short St, Kempsey Showground, and Thompson St. A scale bar indicates 60m. The bottom right corner of the map area contains the text 'POWERED BY esri' and 'Esri Community Maps Contributors, Spatial Services, © OpenStreetMap, Micro...'. The overall interface includes standard map navigation controls like zoom in (+), zoom out (-), home, and refresh buttons.



Aerial Markers



Aerial markers are a solution for improving powerline visibility

- > Our aerial marker program offers **free installation** – the only cost to farmers is the purchase of the markers (up to 10 markers at the property).
- > Farmers may be eligible to claim up to \$1000 of the purchase cost of the powerline markers back via the SafeWork NSW small business rebate.
- > Simply visit

essentialenergy.com.au/aerialmarkers

and request a free assessment and safety advice.



Aerial Markers initiative

- > Essential Energy have changed the approach to the installation of aerial markers
- > Aerial markers can be purchased through Essential Energy –charge for the cost of the aerial markers only – i.e., no labour/plant costs (excluding construction sites)
- > When a third party comes in contact with our overhead network while operating machinery – an onsite assessment (flowchart) is utilised to determine if aerial markers will be fitted - to avoid further re-occurrence. Installation is charged to the parties responsible for the impact
- > Partnered with SafeWork NSW to have the cost of aerial markers included in their Small business rebate.



Additional Safety Resources

Essential Energy has a range of resources available to help keep you safe on the land.

- > **Safety fact sheets** – available for download from Essential Energy website
- > **FREE safety stickers and signage** – available for order on Essential Energy’s website
- > To access, simply visit:

essentialenergy.com.au/safety

- > Watch the training videos on the website or on Essential Energy’s YouTube channel, and
- > Ongoing safety campaigns.

DANGER

THE STOWED HEIGHT OF THIS MACHINERY IS: m

THE EXTENDED HEIGHT OF THIS MACHINERY IS: m

3m
CLEARANCE ZONE
UP TO AND INCLUDING
132,000 VOLTS

6m
CLEARANCE ZONE
ABOVE 132,000 VOLTS
UP TO AND INCLUDING
330,000 VOLTS

8m
CLEARANCE ZONE
ABOVE 330,000 VOLTS

A PERMIT IS REQUIRED IF THE TRANSIT HEIGHT ON A ROADWAY EXCEEDS **4.6m**

LOOK UP AND LIVE
KEEP WELL CLEAR OF OVERHEAD POWERLINES

For safety tips visit essentialenergy.com.au/safety or call 13 23 91. In an emergency call 13 20 80



The outcome of not seeing the power lines

This film is Jason's account of what happened on 27 October 2017.

WARNING

The following video contains graphic imagery.
Viewer discretion is advised.

Essential Energy

Contact us:

General enquiries 13 23 91
Power outages 13 20 80
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engage.essentialenergy.com.au