What happens if your vehicle contacts overhead/underground powerlines?

1. The vehicle will become live at the voltage contacted and the electricity will attempt to pass through the vehicle to the ground.
2. Anything else in contact with the powerlines will also become live, such as fences and trees etc.
3. Electricity will create a potentially dangerous field around anything in contact with the powerline for approximately eight metres.

4. Always treat powerlines and anything in contact with the powerlines as live.
5. Only if you’re not going to create another hazard to yourself or others, drive the vehicle a minimum of eight metres away from the powerlines and anything in contact with the damaged powerlines.

What should happen if the driver of the vehicle needs to be evacuated?

An emergency evacuation is extremely dangerous and should only be attempted as a last resort such as if the vehicle is on fire. Remember, never approach the vehicle to assist in the evacuation and always treat wires as live.

1. It’s critical that you jump well clear to avoid contact with the vehicle and ground at the same time.
2. When you jump, ensure you land with your feet together. Do not touch the vehicle, fall forward or backward, or allow your feet to step apart.
3. You must jump or shuffle with your feet together until you are at least eight metres clear of the vehicle, powerlines or anything else in contact with them.

It is recommended that operators of high machinery practice this jump/shuffle technique on a regular basis.

4. Once clear, do not return to the vehicle for any reason.
What causes the tyres to explode?
When a vehicle contacts overhead powerlines, it causes an electrical current to flow through it. The electrical current can cause tyres to explode at the time of contact and also start burning inside the tyres for up to 24 hours. This can create a build-up of gases and heat causing significant pressure and heat to distort the rims and tyres of the vehicle causing the tyres to violently explode at a later time.

What hazards are created by tyres during and after a vehicle contacts powerlines?
- Tyres become conductive because of the carbon black and metal they have in them, allowing current to flow through the vehicle to ground
- Material from the exploding tyre and surrounding area, such as gravel can be thrown many meters with the potential to injure people nearby.

What should you do if your vehicle contacts powerlines?
- Contact Essential Energy immediately on 13 20 80 to switch off the power. Remain with the vehicle until the power has been isolated and the powerlines removed
- The vehicle needs to be isolated as the hazard posed by an exploding tyre can extend to 300m and for 24 hours after contact.

Evacuation safety precautions
Emergency evacuation is extremely dangerous and should only be attempted as a last resort such as when the vehicle is on fire. Seeing smoke from the tyres does not necessarily mean the vehicle is on fire.

- If immediate evacuation of the cabin is required, the driver should jump clear, ensuring they do not touch the machinery and the ground at the same time. The driver should then shuffle/jump away from the machine, keeping both legs together at all times, until at least eight metres away
- It is imperative that you avoid being in line with the side of the tyres/rims as they may explode.

For more information
Essential Energy’s Public Safety team is available to facilitate Electrical Awareness sessions and discuss any questions relating to electrical safety.

For more information on electrical safety please call Essential Energy:
General enquiries  13 23 91
Power outages     13 20 80
Follow us  Facebook  Twitter
or visit www.essentialenergy.com.au/safety

Essential Energy recommends you familiarise yourself with the latest SafeWork NSW Code of Practice ‘Work near Overhead Powerlines’, which can be viewed at www.safework.nsw.gov.au or you can purchase a copy of the Code of Practice by contacting SafeWork NSW on 13 10 50.

SAFETY FIRST:
- Only if you’re not going to create another hazard to yourself or others, drive the vehicle a minimum of eight metres away from the powerlines and anything in contact with the damaged powerlines
- Be aware that powerlines may fall and as powerlines can be reenergised automatically, all powerlines need to be treated as live
- A competent person should inspect all tyres, bearings and brakes before continued use after powerline contact
- Stay a minimum of eight metres from the vehicle and anything else in contact with the powerlines.