Power Line Distance Requirements

ACTSAFE SAFETY BULLETIN #25A

Use this addendum any time work is being done near overhead power lines, and refer to the following safety bulletins:

#8 — Guidelines for Traditional Camera Cars and Process Trailers

#22 — Elevating Work Platforms (Scissor Lifts) and Aerial Extensible Boom Platforms

#23 — Working with Lighting Systems and other Electrical Equipment

#25 — Camera Cranes

#36 — Drones (Remotely Piloted Aircraft Systems)

Overhead power lines have a limit of approach, which is a safe distance that workers must keep while working. If workers need to work near electrical lines, the employer and workers must know the voltage carried in those lines. Workers must maintain the minimum distances specified in the following table. The limits of approach also apply to equipment such as ladders, scaffolds, booms, forklifts, aerial lifts, sets, cranes, and other rigging.

Minimum approach distance for working close to exposed electrical equipment or conductors		
Voltage	**Minimum approach distance**	
Phase to phase	**Metres**	**Feet**
Over 750v to 75kV	3	10
Over 75 kV to 250 kV	4.5	15
Over 250 kV to 550 kV	6	20

Source: Occupational Health and Safety Regulation, section 19.24.1, Table 19-1A

Keep clear of all power or utility lines, even those that are less than 750 volts, such as electric bus lines. For example, the wires in TransLink's trolley overhead system throughout Vancouver and Burnaby are energized with 600 volts of direct current.

If you're working around power lines, there must be a safety meeting to discuss the safe limits of approach and control measures for working safely. Performers and crew should keep an eye out for overhead power lines. Pay attention to any signage indicating that there are power lines or other overhead hazards.

If you don't know the voltage of a power line, stay back at least 3 m (10 ft.) until BC Hydro has verified the voltage. Stay back 3 m (10 ft.) if it's a transmission line. Contact BC Hydro at 1 877 520-1355 to verify the limit of approach.

If you come across a fallen power line or an exposed underground power line, or if an object comes into contact with a power line, stay back at least 10 m (33 ft.) and call 911. If your equipment contacts a line, stay calm and stay still until help arrives.

Attention

Alert your co-workers and stop work immediately if equipment comes too close to power lines. Notify a supervisor or studio safety representative if there is an issue that needs to be corrected.

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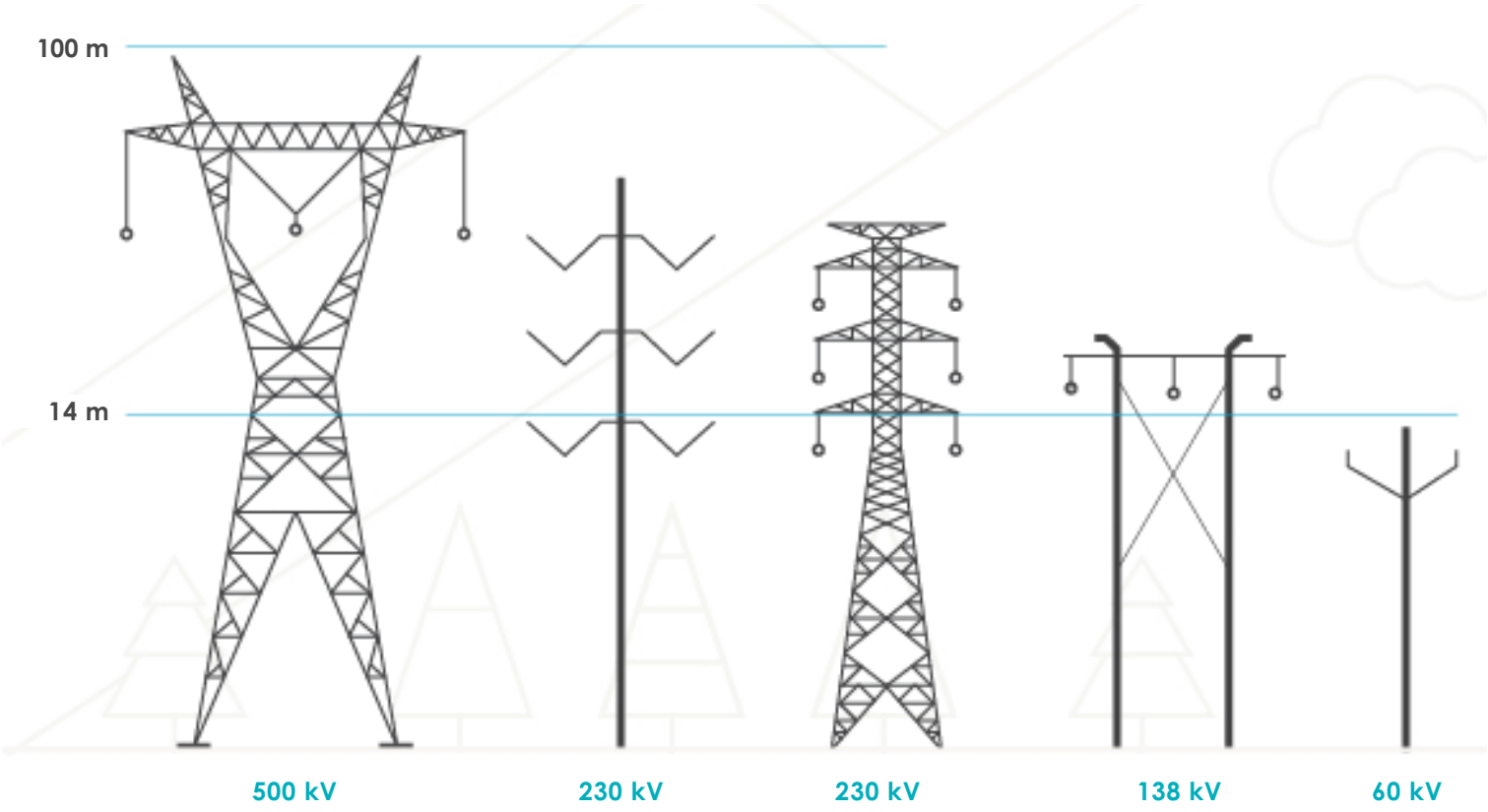
If you're in a vehicle or equipment, stay there until the power lines have been de-energized and grounded. You're relatively safe inside a vehicle or equipment as long as you don't touch or step onto anything outside the vehicle that will provide a path for the current to flow to ground.

For more information on limits of approach and what to do if there is an incident, see the WorkSafeBC publication *Working Safely Around Electricity*.

Identifying transmission towers

The image below may help you identify what kind of voltage may be flowing in the power lines above your head.



Source: BC Hydro

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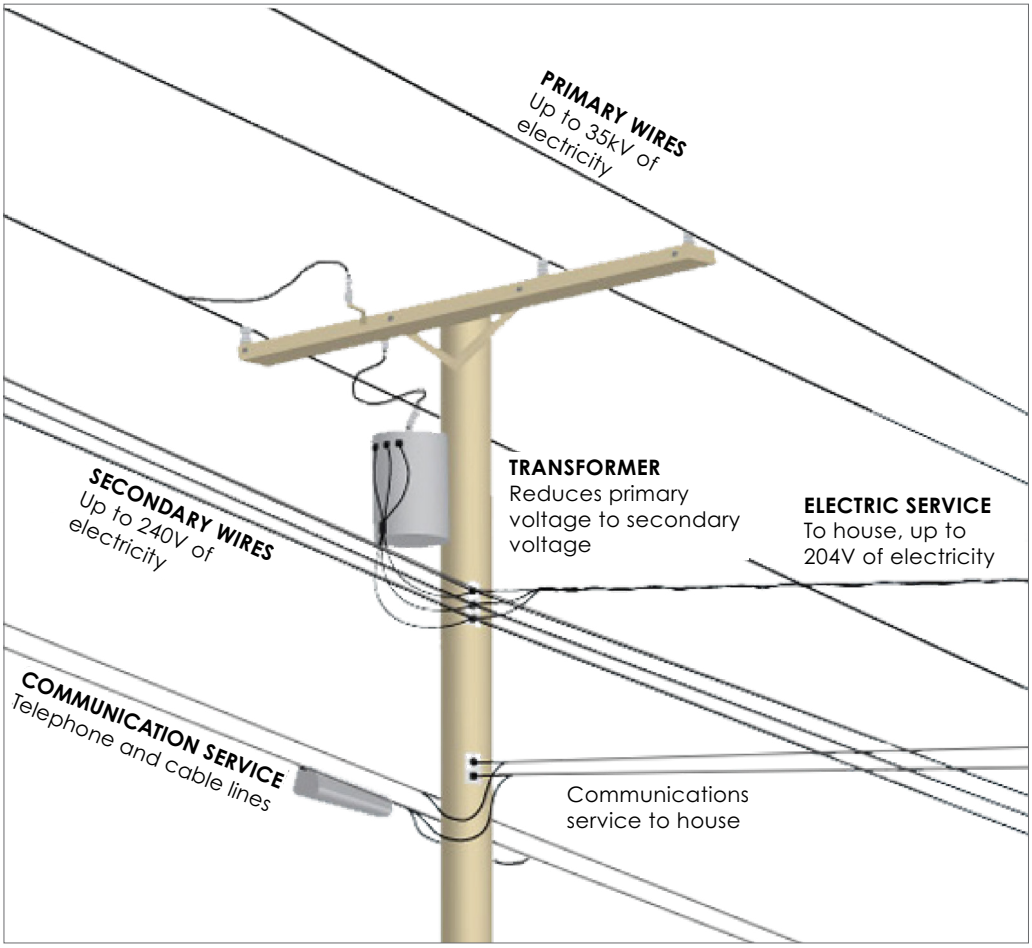
Why so many wires?

There can be many different types of lines running between utility poles. What cables carry what voltage? Which ones should you stay clear of? The image below illustrates the different lines on a utility pole.



Source: BC Hyrdo

Actsafe Safety Association

Actsafe (www.actsafe.ca) is a not-for-profit health and safety association supporting British Columbia's arts and entertainment industries. Actsafe provides resources and training to employers, workers, and supervisors. We are always here to provide information relevant to best practices around health and safety in the arts and entertainment industries in B.C.