

Electrical Safety at Work



All our energy. All the time.



At Maritime Electric, we take electrical safety very seriously. Working in the utility industry, we understand the potential hazards of accidental contact with electricity. Please take the time to read through this brochure for some helpful information on how to better understand electrical safety at your workplace.

Employers: Train Employees

It is essential for employers to provide a safe workplace for all workers. Workers need to be aware of any potential electrical hazards associated with their work. These simple steps may help prevent workplace injuries:

- Always remind ALL workers about overhead and underground power line hazards.
- Give employees specific instructions regarding known electrical hazards such as, "Do not transport this cultivator through this gate because of the overhead power line."
- Consider placing signage and barriers as a reminder.
- Ensure employees are appropriately trained for the tasks they will perform.
- Always hire qualified electricians when required for work on electrical systems.

Workers: Follow Safety Guidelines

Please read the tips below to help you perform your work safely when working around electricity.

- Ensure you have the correct knowledge and skills to do your work.
- Are there risks involved? Before beginning and during a job, consider the risks associated with all tasks you must perform.
- Assess your work area, tools and equipment for hazards and ensure effective control measures are used.

- Make it your business to know where overhead and underground power lines are located and how far you need to stay away from them in order to stay safe.
- Consider the tools and electrical equipment that you may use. Ensure they are inspected prior to use.
- Double check that your equipment or tools have been unhooked, unplugged, disconnected or de-energized when your work is completed.

Minimum Safe Distance from Power Lines for Work Sites¹

 Nominal Phase to Phase

 Voltage of Live Power Line
 0.9 r

 Up to 750 volts
 0.9 r

 751 – 100,000 volts
 3.6 m

 100,001 – 250,000 volts
 5.2 m

0.9 metres (3 feet) 3.6 metres (12 feet) 5.2 metres (17 feet)

Minimal

Distance

Never attempt to measure the distance to lines. Estimate from the ground and, if you're unsure about voltage or distance, call Maritime Electric.

Line Height and Clearance

- Never measure line height yourself.
- If there is a question about the safe distance needed for equipment working in proximity to power lines, call Maritime Electric.
- Avoid encroaching on safe limits. Required clearances must be maintained and inspected by a qualified person prior to re-use.

¹ PEI Health and Safety Regulations



When Working Near Power Lines

- Before you begin your work, note possible hazards.
- If overhead lines are present, or if there may be underground facilities, contact Maritime Electric to find out line voltages and safe limits of approach.
- The height of the power lines may change due to temperature, vehicle collisions, broken guy wires or other causes. Inspect your work site regularly when working in proximity to power lines.
- Ensure the maximum height of a load, including any attachments, is below the legal height limit – 4.15 metres (13.5 feet). If the maximum height exceeds 4.9 metres (16 feet) contact Maritime Electric to determine if lines need to be moved.
- Know where the power lines are at all times use caution when loading and unloading.
- Have a spotter watch and warn you if you are getting too close to a power line.
- Ensure that the dump body or boom of the truck is lowered before moving the truck.

Downed Power Lines are Extremely Dangerous

- If you see a downed power line, always assume they are energized.
- Contact Maritime Electric with the location immediately and warn others to stay away.
- Never attempt to move a downed power line or anything touching a power line.
- Stay away from power lines and anything touching the power line by at least 30 metres (100 feet).
- If required, shuffle or hop never step out of the energized area.

Accidental Contact with a Power Line

It is extremely important to train any newly hired workers in electrical safety and ensure seasonal employees are re-trained as often as needed. Despite all precautions, equipment sometimes comes into contact with power lines. It is important to know how to handle these situations.

- If your equipment comes into contact with power line, move it away from the contacted lines to a safe distance of at least 30 metres (100 feet, if possible.
- If the equipment cannot be moved, stay inside or on it until emergency personnel arrive. If someone approaches, tell them to stay 30 metres away and contact 9-1-1.
- If there is a fire and you must leave the equipment, jump and land with both feet together. Never touch the ground and the machinery at the same time. Move away by shuffling your feet side-by-side or hopping. Do this until you are at least 30 metres away.

Perform a thorough inspection of any equipment involved with an electrical contact. Tires, hydraulic equipment, electrical equipment and other equipment may be damaged. As required, have

a qualified person inspect potentially damaged equipment.

Downed power lines are very dangerous. Never attempt to move a downed power line or anything that may be touching it. Always assume the downed power line is energized. If you see a downed power line, call Maritime Electric and warn others to stay at least 30 metres (100 feet) away until qualified personnel arrive to fix the problem.

Ground conditions can increase the hazard area - so if the conditions are wet or if steel fencing or guard rails are present - increase the distance that you stay clear and warn others to stay clear.

If a Downed Power Line Falls on Your Vehicle

- If you are in your vehicle and it makes contact with a power line, stay inside your vehicle until help arrives. If still operable, try and move the equipment or vehicle away from the electrical source and contact Maritime Electric.
- Never touch the ground and your equipment or vehicle at the same time.
- If your equipment or vehicle is on fire and you must exit:
 - Jump free of the vehicle without touching it
 - Hop or shuffle along the ground until you are 30 metres away from the vehicle.

Contact Us

If you are interested in having a Maritime Electric employee deliver an Electrical Safety in the Workplace presentation please contact us.

All our energy. All the time.



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