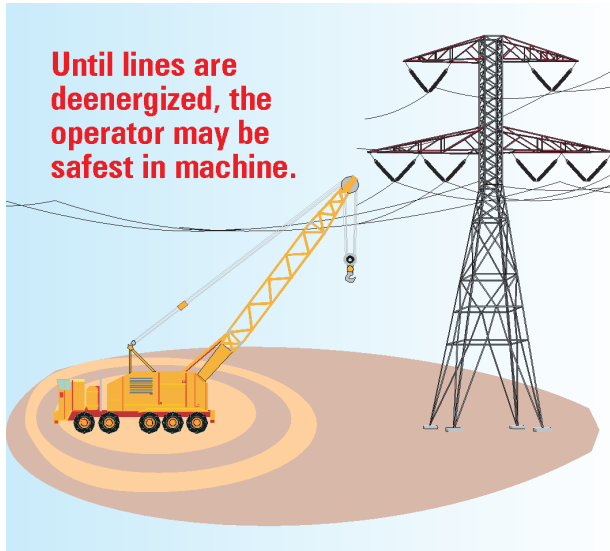


What If Contact Happens?



Do not touch equipment or a person in contact with electricity. Get the line de-energized.

If you are in a vehicle that contacts electricity, stay in the vehicle and do not contact any metal. If you must exit, jump clear and slowly shuffle away. Keep your feet together to help prevent current from running through your body.

Until the lines are de-energized, the operator may be safest in the machine.

Can We Be Safe Around Buried Utilities?

Before digging, call the electrical, gas, and communications utilities. Review marked out areas. The mark out may not be exact, so dig by hand within 3 feet of it.

When digging, look for:

- foreign debris in excavation,
- changes in mixed-up soil types,
- asphalt patches or depressions indicating previous digging, and
- concrete, plastic, or gravel.



©2009 Laborers Health & Safety Fund of North America, Washington, DC. All rights reserved. This material was produced under grant number 46C3-HT06 from the Occupational Safety and Health Administration and is based upon work supported by the Federal Highway Administration under grant agreement DTFH61-06-G-00007. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the Author(s) and do not necessarily reflect the views or policies of the U.S. Department of Labor or the Federal Highway Administration. No statement made in this booklet should be construed to convey an impression that any member of the consortium, its affiliates, or employees have assumed any part of the employer's exclusive legal responsibility for providing a "safe and healthful workplace" as mandated by the Occupational Safety and Health Act. Nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government. Produced for the consortium by FOF Communications.

Electrical Hazards



U.S. Department of Transportation
Federal Highway Administration

What Are the Dangers of Electricity?



Contact with electricity can cause explosion, fire, and electrocution. Electricity can cause severe burns and death.

Equipment contacting a live electrical line can cause explosion, fire, or electrocution. Electricity can arc from the line to equipment.

Work around electricity only:

- when you are trained in all aspects of the job, and
- when you have a reason to be there.

How Do We Treat Above-Ground Utilities?

Use extreme caution and keep your distance when you must work around above-ground utilities. The best practices are:

- Get the utility company to mark, flag, and shield line.
- Assume the line is live until it is tested. Have it de-energized and visibly grounded.
- If the line must remain energized, keep equipment and load at least 10 feet away and use a spotter to warn the operator.



Post warning signs at ground level. Make anyone who must enter the area aware of the overhead lines. Here are two tips for operators:

- Mark a safe route for repeated travel.
- Slow down.

Minimum Safe Distances Overhead Power Lines

Voltage	Distance
50 kV or below	10
> 50 - 200 kV	15
> 200 - 350 kV	20
> 350 - 500 kV	25
> 500 - 750 kV	35
> 750 - 1,000 kV	45

More in fog or rain

Color Codes Painted on Surface

Gas Line - includes liquid and propane

Electric

Water

Sewer

Telecommunications - includes cable TV, copper, fiber optics