Safety Brief - 2018-2

Safety Brief Series

Working Safely Near Power Lines

It is not uncommon to work around power lines. However, the potential hazards to workers are enormous, and workers must use extreme caution.

Instructor Note

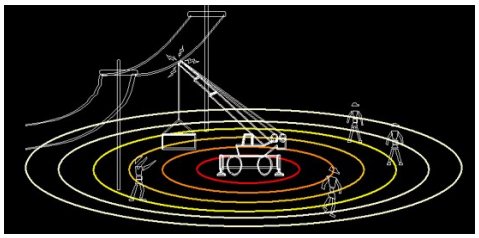
Power companies get very concerned when construction and maintenance equipment gets close to or touches a power line. They also will notify OSHA, who will visit the site.

If you are working on a hoisting/rigging, excavating, grading or construction project within an electric line right-of-way, keep in mind the risks associated with overhead high-voltage power lines. Non-electric utility crane operators must contact the local electrical distribution company to verify voltage.

Guide for Discussion

How to Avoid Electrocution:

- Locate all power supplies; besides this being the state law, it's smart.
- Be aware of overhead power lines and equipment, and maintain safe working distances from energized parts.
- Have the power company inform you of the voltage and arc distances.
- Shut off or insulate the power line(s) if possible.
- Never allow a piece of equipment to break the safety zone (the distance required to avoid electric arc).
- Use extreme care with ladders and scaffolding.
- Establish a clearance boundary around power lines before work begins.

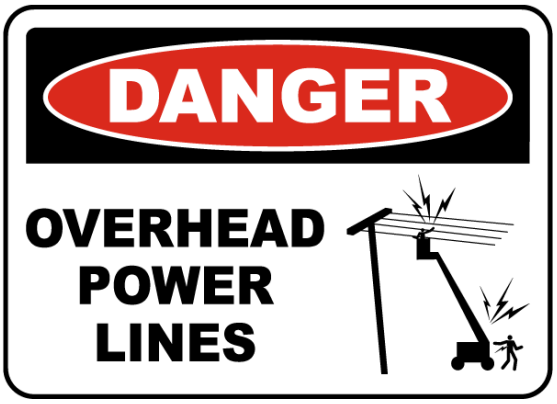


- Pay attention to line clearance distances. The height above the ground can vary, based on power load.
- Use a spotter when operating heavy equipment.
- Call the local electrical distribution company if unsure about line voltage rating and safe working distances from power lines and equipment.
- Comply with all OSHA requirements and applicable state and federal regulations, including OSHA's crane standards.

Guide for Discussion cont...

General Rules to Remember:

- Designate a competent lead signal person.
- Communicate clearly with all members of the work crew.
- Have all crew members watch the operation.
- Be alert.
- Watch for non-alert crew members.



Additional Discussion Notes

Remember:

Whenever you are near a power line, be sure to minimize the risk by de-energizing or insulating the power source. Only then proceed with caution. At all times, try to avoid entering an arc zone. It is far better to be safe than sorry.

OSHA Minimum Safe Working Distances from Exposed Energized Parts (including overhead lines) for Non-Qualified Personnel

Nominal Voltage Phase-to-Phase (V)	Minimum Working Distance in Feet
0 to 50,000	10
Over 50,000 to 200,000	15
Over 200,000 to 345,000	20

For assistance with determining voltage and safe working distances, please contact the local electrical distribution company.

Visit the CT Department of Energy & Environmental Protection website to find Connecticut's Electric Distribution Companies' information:

http://www.ct.gov/pura/cwp/view.asp?a=3352&q=405244

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