

Energy

Guidelines

for General Contractors Safety on the Job

DON'T TAKE CHANCES.

Electricity is a powerful source of energy with the potential to cause injury if precautions aren't taken. Everyone should take precautions when working near or with electric power lines. Here's how you can protect yourself around power lines. Remember, power lines are located both overhead and below the ground.

- Always follow state and federal laws and regulations.
- Be alert while you work.
- Be alert to changing conditions.
- Use common sense.

RULES TO KEEP. NUMBERS TO KNOW.

Always remember this basic rule: No person, equipment or object should ever come within 10 feet of a power line.



According to state law, Texas Health and Safety Code, Chapter 752: It is illegal for a person to perform any work or erect any structure under circumstances in which it is possible for a person or any object a person is holding to come within six feet of high-voltage overhead electric lines.

In addition, the U.S. Occupational Safety & Health Administration (OSHA) regulations state a worker or any part of a conductive material, tool, piece of equipment or machine must not come within 10 feet of an energized line 50,000 volts and below. For power lines above 50,000 volts, this minimum clearance requirement increases four inches for every 10,000 volts. These requirements as set out in the Code of Federal Regulations, Title 29.

Remember:

- Violating these laws can result in injuries, as well as OSHA fines and civil and criminal penalties.
- Responsibility for safety belongs to you and your employer.
- Training also is another of your employer's important responsibilities.
- If you are not a trained lineman, don't climb utility poles.

SAFETY **STARTS** BEFORE THE WORK BEGINS.

- Always check for location of power lines above and below the ground before starting any construction activity.
- 2. If your work will be within 10 feet of power lines, contact CenterPoint Energy at least 48 hours before beginning.
- 3. Work must not start until all parties responsible for the work and the utilities have negotiated a satisfactory mutual arrangement to provide temporary de-energization and grounding, temporary relocation or raising of the line, or temporary mechanical barriers to separate and prevent contact between the line and the material or equipment or the person performing the work, activity or function.
- Ensure that anyone working on the project is aware of the locations of power lines above and below ground, throughout the entire project.
- 5. Remember CenterPoint Energy high-voltage overhead power lines have no protective covering.
- 6. Consider all lines as energized. Wire size has no bearing on voltage level.
- 7. Never allow materials, tools or your body to come within 10 feet of power lines.
- 8. If you lose control of a ladder, scaffold jack or any object falling toward a power line, LET GO AND JUMP CLEAR OF THE OBJECT.
- If any object contacts a power line, call CenterPoint Energy immediately to remove it.
 Stay back and keep the public and workers away until the condition is made safe.
- Low-voltage lines ranging from 120 to 480
 volts are also found throughout the service
 area. Maintain approach distances as required
 by OSHA from these low-voltage lines.
- 11. By Texas state law, only professionals who are authorized by the local electric utility are allowed to trim or remove trees next to energized power lines.

DANGER BELOW

Did you know that almost 45 percent of CenterPoint Energy's power lines are underground? In addition to power lines, there may be phone lines and/or gas lines that run underground, possibly directly in the path of your construction crew. To be sure you won't cut through any of these lines, potentially endangering your life and others:

CALL 811

(at least 48 hours or two working days prior to excavation). Visit the 811 website **CALL811.COM** for more information.

WHAT TO EXPECT ONCE YOU CALL

811

Once a ticket is created, all CenterPoint Energy underground lines in an easement will be marked via color-coded paint and/or flags. Refer to the chart to the right to see what each color means.

If you're planning to dig, you are also responsible for:

Locating underground service conductors from CenterPoint Energy-owned transformers or secondary pedestals that run to customers' structures. Contact the CenterPoint Energy locating department for information on locating service contractors at 713-207-5463.

Use caution by hand digging in and around an 18-inch tolerance zone on either side of paint or flags.

REASONS TO CALL 811:

- 1. Threat to life, health and property
- 2. Loss of service
- 3. Expense for repair
- 4. It's the law

KNOW THE COLOR CODE

Red: Electric power lines, cables, conduit and lighting cables

Yellow: Gas, oil, steam, petroleum or gaseous materials

Orange: Communication, alarm or signal lines, cables or conduit

Blue: Potable water

Purple: Reclaimed water, irrigation and slurry lines

Green: Sewer and drain lines

f any equipment (including, but not limited to, cranes, excavators, well-drilling or oil rig drills) contacts overhead or underground electric lines, rigs, hauling equipment, pipe pushers, hand tools, earth movers, graders, equipment energized

HERE'S WHAT TO DO:

- Call 911 if necessary, then immediately contact CenterPoint Energy at 713-207-2222. Tell them the site location and whether the situation is life-threatening.
- Ensure someone guards the site to warn others away from the area.
 Keep people clear of the energized equipment, any fallen power lines or other objects touching them.
- 3. If electrical contact occurs, consider the equipment energized. The equipment operator on the rig is usually safe, as long as the operator remains away from ground contact. If it can be done safely, the equipment operator should attempt to break contact with the overhead or underground line by moving the equipment away from the area.
- 4. If the operator must leave the equipment, he or she should jump entirely free of the machinery. Body contact with the machine and the ground, simultaneously, could be fatal.
- 5. If a shock victim is clear of the equipment or wires, first aid may be necessary. While waiting for medical assistance, if you are trained, provide cardiopulmonary resuscitation (CPR) to the victim if necessary. Work quickly, as any delays can decrease the chance of reviving a victim.

SAFETY FIRST. SAFETY ALWAYS.

ALWAYS:

- Be aware of the potential dangers of overhead and underground power lines.
- Know state and federal laws and your responsibilities concerning working around power lines.
- Inspect your work site by looking around and above you before you start a job.
- Maintain your distance and make awareness of the power lines a priority through completion of the job.

WORK SAFELY... IT'S THE LAW.

Did you know that federal regulations and Texas statutes provide specific safety requirements for working around power lines?

These regulations help protect workers from injury and death and are proven effective if properly followed. These laws apply to anyone working around power lines.

Violators may be subject to criminal penalties, as well as civil liabilities. Even worse, failing to comply with these requirements could result in serious injury or death to a worker.

CenterPoint Energy urges all employers and other responsible parties to stress the subject of electrical safety to workers on the job. The consequences of not doing so can be serious.

CenterPoint Energy can and will provide assistance to you upon your request. As a reminder, we have summarized some of the safety regulations and laws that apply in Texas in order to work safely around power lines. Please take the time to read completely through the full text of these requirements.

REMEMBER:



ALWAYS CALL
CENTERPOINT ENERGY
BEFORE WORKING IN
THE VICINITY OF ANY
POWER LINE.

OSHA REGULATIONS*

- Employers must establish safety-related work practices to protect employees against the danger of contacting power lines.
- Before any work begins, the employer must determine whether the work may bring any worker, tool, or machine near a power line. If so, the employer must post warning signs, advise employees of the location of the lines, the hazards involved, and protective measures to take.
- 3. Every power line must be treated as energized unless and until the utility indicates that it is not energized.
- 4. If work is to be performed near power lines, the lines must be de-energized or other protective measures must be taken BEFORE any work begins. If the lines are to be de-energized, arrangements must be made with the electric utility.
- 5. For power lines of 50,000 volts and below, a worker or any part of a conductive material, tool, piece of equipment or machine must not come within 10 feet of an energized line. For power lines above 50,000 volts, this minimum clearance requirement increases four inches for every 10,000 volts.
- 6. Violators are subject to criminal penalties.

TEXAS LAW**

- Work must not be performed around power lines if at any time it is possible that a worker or any part of a tool, machine, piece of equipment or material may come within six feet of the lines.
- 2. The only exception to these requirements is when the parties responsible for the work have effectively guarded against the danger of contacting the lines. Those parties responsible for the work must notify the electric utility at least 48 hours BEFORE the work begins to arrange for measures to guard against contact with the lines. The work may not begin until those parties and the utility have negotiated and taken proper safety precautions, such as de-energizing the lines.
- Responsible parties that violate this law are subject to criminal penalties. In addition, if a violation results in contact with a power line, they are also liable to the utility for all damages and liability it incurs due to the contact.
 - *Code of Federal Regulations, Title 29.
 - **Texas Health and Safety Code, Chapter 752.

If you would like to schedule an electrical safety program at your construction site, industrial plant or fire department, call CenterPoint Energy Public Safety at 713-945-6707.



YOUR SAFETY. YOUR HANDS.



CenterPoint Energy works hard to help you stay safe around power lines. But we're powerless against inaction. Because your safety is in your hands. Stay Aware. Stay Safe.



Always There.®