

FIRST RESPONDER BEWARE®

Staying safe while saving others: Electrical safety for first responders Firefighters, police, and EMTs are typically first on the scene in an emergency and face the greatest risk from electrical infrastructure contacts.

Understanding the potential dangers and dealing with them correctly makes everyone safer.

This program is designed to supplement, not replace, your department's standard operating procedures (SOPs).



## **Electrical Safety Basics**

- Respect the Power of Electricity
- Hands Off Electrical Systems
- Protect Yourself and Others from Shock
- Always Observe the 10-Foot Rule
- Be Aware of Overhead Power Lines
- Use Extra Caution Near Downed Power Lines
- Manage Substation and Transformer Fires



## Respect the Power of Electricity

- Electricity always seeks the easiest, most direct path to the ground through conductors:
  - Your body
  - Trees
  - Water
  - Metal objects and structures
  - Long or tall equipment
- Even low-voltage electric shock can be fatal.
- Standard-issue protective gear DOES NOT insulate you against electric shock.
- Electric shock and burn injuries may include internal tissue damage that is not immediately apparent. Make sure victims receive thorough medical attention.



# **Hands Off Electrical Systems**

- Never attempt to disconnect electrical services:
  - Never cut service wires.
  - Never attempt to remove electrical meters. This is extremely dangerous and can cause serious injury or death.
  - Never attempt to open or enter a manhole or vault until you are sure it has been de-energized.
- Never touch or attempt to move power lines.



## **Protect Yourself and Others from Shock**

- Always identify power lines and electrical equipment upon arrival at an incident scene.
- Assume all lines are energized as well as all objects in contact with power lines.
- If power lines or electrical equipment are involved in an incident, have your dispatcher call 911 and Evergy at 800-383-1183 for Kansas Central, OR 888-471-5275 for Kansas Metro, Missouri Metro & Missouri West
- Provide the best possible directions to the location.
- Secure the area.





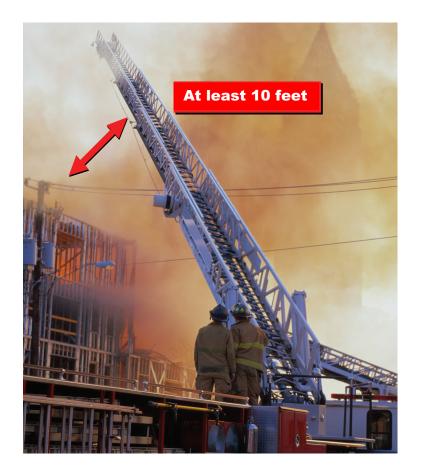
## Always Observe the 10-Foot Rule

- Keep yourself, your equipment, and your water stream AT LEAST
   10 feet away from power lines.
- Higher voltages require greater clearances.
- There is no uniform system for identifying power line voltage.
   When in doubt, contact Evergy for clearance information.
- Have a spotter monitor the placement of ladders near power lines and service wires to ensure they remain the required distance away when fully extended.
- Electrical safety clearance distances given are minimums. Always use the maximum possible distance.



### **Be Aware of Overhead Power Lines**

- Park emergency vehicles as far away as possible from overhead power lines.
- Keep aerial equipment
   AT LEAST 10 feet away
   from overhead lines.





#### **Be Aware of Overhead Power Lines**

- If your equipment contacts a power line:
  - The equipment should be considered energized.
  - Call 911 and Evergy at 800-383-1183 for Kansas Central, OR 888-471-5275 for Kansas Metro, Missouri Metro & Missouri West.
  - If you can do so safely, move the equipment away from the line.
  - If the equipment cannot be moved, stay put, and warn others to stay away until utility personnel give the all clear.



#### **Be Aware of Overhead Power Lines**

- If fire or other imminent danger forces you off the equipment:
  - Jump clear, keeping both feet together and without touching the equipment and the ground at the same time.
  - Land with your feet together and shuffle away, keeping your feet close together and on the ground at all times.
  - Do not run or take large steps.
     When equipment contacts a line, electricity spreads out in the ground like ripples in a pond and the voltage decreases with distance from the point of contact. If your legs bridge two areas of different voltage, you could be killed.





### **Use Extra Caution Near Downed Power Lines**

- Park emergency vehicles away from fallen lines.
- Secure the area:
  - Keep yourself and the public AT LEAST 30 feet away from fallen power lines.
  - Transmission lines from large towers require a distance of 100 feet.
- Never touch or attempt to move fallen lines or objects contacting them.







#### **Use Extra Caution Near Downed Power Lines**

- DO NOT enter, approach, or contact areas or vehicles that may be energized.
  - Call Evergy.
  - Instruct occupant(s) to drive away from the line if this can be done safely.
  - If the vehicle cannot be safely moved, instruct the occupant(s)
    to stay put until utility personnel give the all clear. Staying in
    the vehicle is their BEST protection against electric shock.



## **Use Extra Caution Near Downed Power Lines**

- If occupants in an energized vehicle are in imminent danger from fire or other hazards, do the following:
  - Instruct them to jump clear without contacting the vehicle and the ground at the same time.
  - Tell them to land with their feet together and shuffle away, keeping their feet close together and on the ground at all times.
  - Demonstrate the proper procedure from a distance.
  - Instruct them to not return to the vehicle.
- If victims are injured, disabled, or otherwise unable to safely exit the vehicle on their own, your incident commander will assess the situation and tell you how to proceed.



#### **Substation Fires**

- Burning electrical equipment is already ruined and will be replaced.
   The safest course of action is to LET IT BURN.
- Contact Evergy and wait for their personnel to arrive. Never attempt to enter a substation without utility personnel present.



- Evacuate the area. Keep people AT LEAST 300 feet away and upwind from the substation.
- Electrical equipment contains oil. Be alert for explosions and toxic smoke.
- Protect area exposures to prevent fire from spreading.
- Prevent contamination of water resources. Monitor for oil runoff and direct it away from catch basins, surface waters and wetlands.



### **Transformer Fires**

- Do not open or enter switch cabinets or pad-mounted transformers.
  - Never cut locks or pry cabinets open. Equipment contains live electrical components, and if you contact them you could be killed.
- Call Evergy. Evacuate the area; keep people AT LEAST 300 feet away and upwind from the transformer. Protect exposures.
- Let transformers burn until otherwise instructed by utility personnel.





# **Electrical Safety Review**

- Identify all overhead power lines and electrical equipment upon arrival at an incident scene.
- Whenever you suspect electrical infrastructure is involved, or when in doubt, call Evergy at 800-383-1183 for Kansas Central, OR 888-471-5275 for Kansas Metro, Missouri Metro & Missouri West.
- Hands off electrical systems.
  - Never attempt to disconnect electrical service.
  - Never touch power lines.
- Assume all power lines are energized and keep yourself, your equipment, and your water stream AT LEAST 10 feet away.
- Even low-voltage electric shock can be fatal, and your gear does not insulate you against electric shock.
- When responding to a substation or transformer fire, let it burn, evacuate the area, and protect exposures.



### **Contact Information**

- In case of emergency, call 911 and Evergy at 800-383-1183 for Kansas Central, OR 888-471-5275 for Kansas Metro, Missouri Metro & Missouri West.
- For additional information, visit Evergy's website at evergy-safety.com/firstresponder.





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