

# HOW CLOSE IS TOO CLOSE?

## When can a tree, a fence, or a building be dangerous? When it's too close to a high voltage transmission line!

Electrical transmission lines are a familiar part of the American landscape that stand as a testimony to this country's progress through electrification. But transmission line voltages present a very real danger when trees, buildings, equipment, and other obstacles are too close.

Objects and structures near a transmission line increase the chance of unintentional contact. Touching a transmission line (or an object that is touching one) can result in serious injury, even death, as electricity seeks a path to ground. Extra caution is required from landowners whose property is crossed by transmission lines.

**Contacting a transmission line can result in injury or death.**

**Southwestern Power Administration** (Southwestern), an agency of the United States Department of Energy, maintains nearly 1,400 miles of high voltage transmission lines in Arkansas, Missouri, and Oklahoma. These lines, which operate at voltages ranging from 69,000 to 161,000 volts (69-161 kV), are located within corridors, or

rights-of-way, that provide a safety zone around the lines. Southwestern indicates its rights-of-way with signs located on or near its transmission structures.

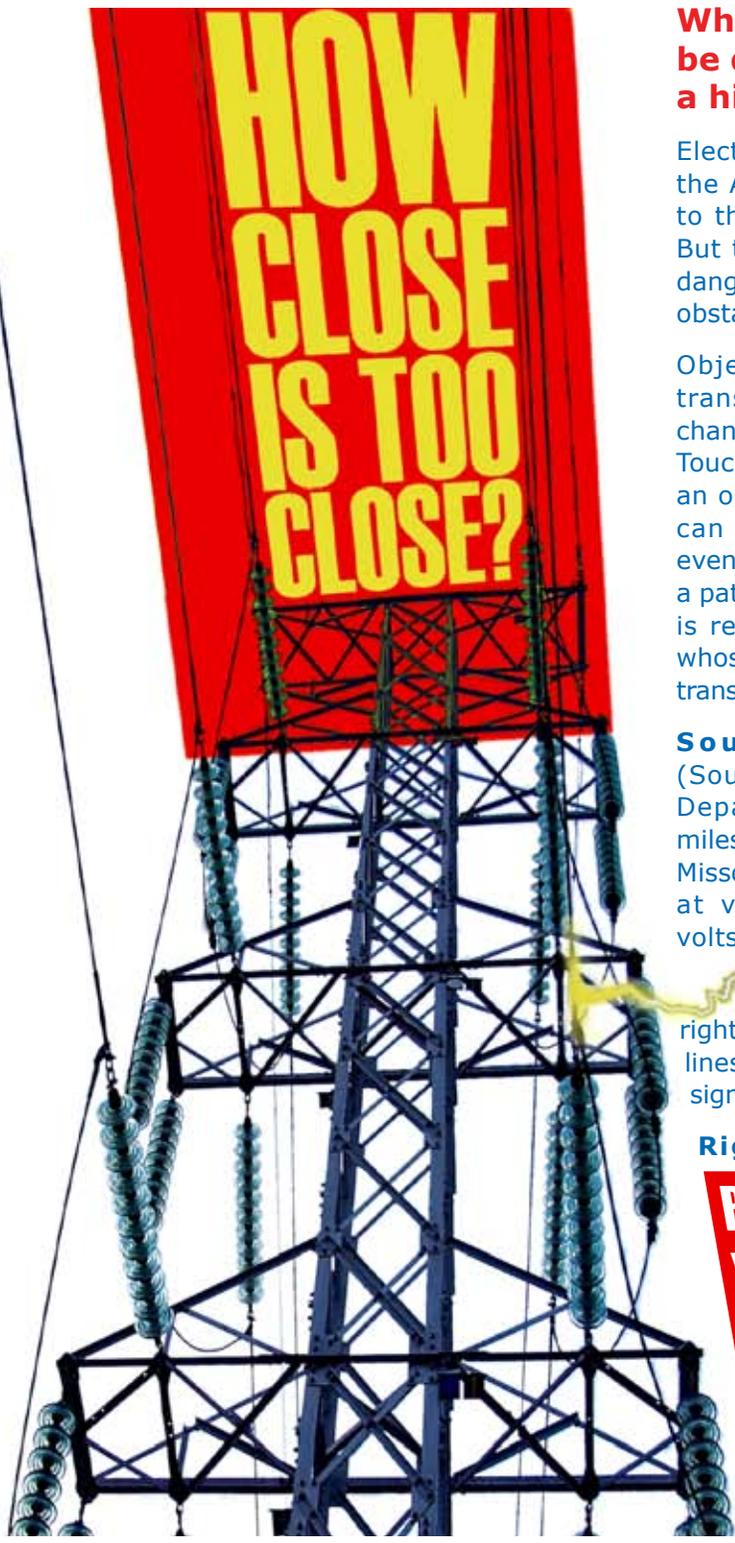
**Right-of-way maintenance is critical** to system reliability and safety. Southwestern performs regular patrols to keep its rights-of-way clean and free of trees, underbrush, and other obstacles that could cause power outages or endanger persons living or working near the transmission lines.

**Rights-of-way must be kept free of trees and other obstacles.**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City or Town \_\_\_\_\_  
State, ZIP \_\_\_\_\_  
If rural location, directions to property \_\_\_\_\_  
E-mail Address \_\_\_\_\_  
Daytime Phone ( ) \_\_\_\_\_  
Evening Phone ( ) \_\_\_\_\_

CUT ON DASHED LINE

I would like more information concerning authorized uses of Southwestern rights-of-way.



**Southwestern needs the cooperation of property owners** to keep its transmission corridors safe and to prevent injury, death, property damage, and unauthorized uses of its rights-of-ways. Contact Southwestern prior to planting, constructing, or digging near or within one of its rights-of-way, or to report anything located in one of its rights-of-way.

**Southwestern works with property owners** to ensure that any potential use of a right-of-way does not pose a threat to public safety or to the reliability of the electrical system. Unauthorized use, however, could result in the removal of structures or other personal property at the expense of the property owner.

CUT ON DASHED LINE

**Call 918-595-6600 or e-mail  
property@swpa.gov  
for all right-of-way issues.**

**Follow these simple DOs and DON'Ts to keep yourself and others safe:**

- DO** obtain written approval from Southwestern before planting, digging, or constructing anything near or within Southwestern's rights-of-way.
- DO** contact Southwestern to report anything located in one of its rights-of-way.
- DO** contact Southwestern if you see a downed or damaged Southwestern transmission line.

**DON'T** cut or trim trees that are near transmission lines. Contact Southwestern for assistance.

**DON'T** use heavy machinery such as backhoes or cranes near transmission lines.

**DON'T** touch trees or other objects that are in contact with a transmission line.

**How close is too close? Take note:**

- Unintentional contact with transmission lines resulted in **387 deaths** from 2000 to 2003, according to the National Safety Council.
- Trees and other objects do not have to physically touch a high-voltage line to be dangerous. **Electricity can jump** or "arc" up to 10 feet through the air, delivering a severe, or even deadly, shock, in addition to starting a fire or destroying equipment.
- All transmission lines should be **treated as energized**, because there may not always be evidence that high voltage is present. No arcs or sparks does NOT mean "no electricity."
- A downed high voltage line can reach temperatures of up to **36,000° F**, and can electrify a large ground area around it.
- More than 7.5 million people ultimately use the wholesale power marketed by Southwestern. **A single outage** can disrupt service to homes, businesses, hospitals, emergency response centers, water treatment plants, and other crucial facilities.

CUT ON DASHED LINE



Please use the attached form to request more detailed information regarding authorized uses of Southwestern's rights-of-way. Or call **918-595-6600**.

A Southwestern representative can inform you of the possible hazards involved with being too close to high voltage transmission lines. Your comments and questions are welcome.



**Southwestern Power  
Administration**

**One West Third Street  
Tulsa, OK • 74103-3502**

**918-595-6600 • www.swpa.gov**