



## **Power Line Clearance Standards for Electric Service Reliability**

### **Overview**

- CenterPoint Energy's Power Line Clearance Standards include clearing vegetation/trees that have the potential to interfere with the safe and reliable operation of its transmission and distribution lines. More than seventeen minutes of every hour customers are without power each year results from vegetation contacting power lines. During thunderstorms and hurricanes, most power outages are caused by trees and large branches falling onto power lines due to high winds.
- The company employs degreed foresters to work with qualified tree-trimming contractors in an effort to trim trees and train them to grow away from power lines.
- As fellow residents of the greater Houston area, CenterPoint Energy understands and supports the important role that trees play environmentally and for the beautification of our communities. The company recommends a philosophy of "the right tree in the right place."
- CenterPoint Energy's tree-trimming clearance standards are based on clearances the company believes are necessary to provide and maintain service reliability.

### **Distribution Vegetation Management Program**

- Distribution lines are generally located on wooden poles along roadways or in easements along property lines. They carry 12,470 or 34,500 volts of electricity. Power lines with greater voltages require greater clearances to maintain an acceptable level of reliability.
- CenterPoint Energy annually trims 700,000 to one million trees on its distribution system. There are a total of 3.5 million trees on its distribution system that need to be trimmed periodically.
- Currently, more than 100 contractor tree crews work daily to maintain distribution lines throughout CenterPoint Energy's greater Houston service area.
- About 85 percent of CenterPoint Energy's Distribution Vegetation Management work is for planned, circuit-wide maintenance due to reliability performance, the remaining 15 percent is unplanned, localized maintenance, i.e. in response to immediate reliability issues identified by CenterPoint Energy's operations personnel or direct customer requests.
- CenterPoint Energy tracks every interruption on its distribution system and identifies whether incidents are due to weather, trees, equipment failure, etc. Under certain circumstances, when data indicates that interruptions can be attributed to trees, the company executes orders as necessary to proactively trim trees along the circuit/power lines to improve service reliability.



- When CenterPoint Energy removes trees along its distribution lines with the permission of the property owner, CenterPoint Energy often offers tree replacements for those trees that the company believes are especially in need of removal. If a tree is removed at a customer's request, a replacement tree may not be offered.
- Customers may request trees to be trimmed or removed along CenterPoint Energy's distribution lines by calling their retail electric provider or CenterPoint Energy customer service. Within 10 days of receiving the request, a tree contractor will make an inspection. If trimming or removing the trees will improve immediate reliability problems or mitigate a safety or equipment hazard, the trees will be trimmed or removed. Otherwise, trimming or removal may be deferred until normal maintenance is required.
- When tree trimming is planned, a contractor will place notification door cards with contact information on the doors of customers' homes – except for situations in which immediate action is required or it is not obvious where to leave a card. If contacted, the contractors will make appointments with customers to address concerns before the work is done. The contractor, rather than CenterPoint Energy, should be contacted first to set appointments.

#### **Transmission Vegetation Management Program**

- Transmission lines are generally located on large steel towers or poles within rights-of-way owned by CenterPoint Energy. They carry 69,000, 138,000 or 345,000 volts of electricity.
- In order to maintain a predictable, low-growing vegetation environment within its transmission line corridors, CenterPoint Energy follows these practices:
  1. CenterPoint Energy requires a greater distance between vegetation and its transmission infrastructure because of the higher voltages and greater movement of conductors in transmission lines. If a tree makes contact with a transmission line, hazardous electric current is injected into the ground that can travel across local underground cables and pipes causing severe damage to public and private property. An outage on a transmission line can impact 100,000 customers or more.
  2. Rights-of-way are cleared of all tall-growing species from edge to edge during the initial construction of a transmission line and are maintained in the same manner. This involves removal of trees within the right-of-way and side trimming of branches that hang over into the right-of-way.
  3. The right to remove trees and other vegetation is typically included in CenterPoint Energy's standard transmission easement purchase agreements.
  4. Where transmission lines cross or run along streets within the street right-of-way, CenterPoint Energy will meet and discuss concerns with the city, county or state forester and follow his/her recommendation, i.e. trim only, remove, or remove and replant the area with approved species.



5. CenterPoint Energy currently inspects and maintains its transmission rights-of-way and transmission line vegetation growth on a five-year cycle, which means that 20 percent of the circuits/lines have trees removed and/or trimmed annually.
  6. CenterPoint Energy makes an annual aerial inspection of the rights-of-way to identify trees that are dead, dying or compromised (e.g. root erosion near creeks) in such a way that they may fall onto an adjacent transmission line. Since such trees are usually located outside of the right-of-way, CenterPoint Energy attempts to obtain landowner permission to remove these trees before they fall.
- CenterPoint Energy's transmission line clearance standard has proven effective. As a result, we have not experienced any recent major transmission incidents related to trees or vegetation.

**What can customers do?**

- Customers can take the following steps to help avoid the need for tree trimming/removal:
  1. When planting trees, select a location away from power lines.
  2. Call CenterPoint Energy or see our tree trimming Web page at [www.CenterPointEnergy.com/trees](http://www.CenterPointEnergy.com/trees) for an approved list of species that can be planted under or near power lines.