

## Eversource's System Resiliency Program

A "resilient" electric system delivers more than improved reliability. It can better withstand damage when extreme weather strikes.

That's why Eversource has developed a five-year, \$300 million System Resiliency Program. Beyond our everyday efforts, we're making an investment in our future and yours, to deliver more reliable power and superior customer service

Strategic tree trimming  
Advanced technology  
Stronger poles and wires

More Reliable Power,  
Every Day



## Program Overview

Since 2013 and continuing through 2017, Eversource will upgrade selected circuits within its electric system. A circuit is a main line that may run through several towns over many miles. When a circuit is disrupted, a power outage can occur.

The System Resiliency Program includes four major initiatives:

- **Tree Trimming** — Clearing electric lines of limbs and branches; and removing weak, dead or diseased trees that can bring down wires if they fall.
- **Electrical Hardening** — Replacing bare, copper wires with thicker, rubber-coated wires that are more weather- and tree-resistant.
- **Structural Hardening** — Installing stronger poles, crossarms and hardware that are more durable and weather-resistant.
- **Equipment Automation** — Upgrading technology in field locations such as substations to remotely monitor, identify and more quickly resolve power outages.

## Customer Benefits

With work underway in neighborhoods across the state, the resiliency program will improve power reliability for all Eversource customers:

- Better day-to-day system reliability.
- Reduced frequency and duration of power outages from severe weather.

More than 90% of outages during storms are caused by falling trees and tree limbs.



## Communicating and Coordinating

Resiliency work will be well-coordinated and communicated:

- Eversource will coordinate all parking, traffic and debris-disposal details with local and state officials.
- Eversource's qualified tree contractors will work directly with customers.
- Wood chips or cut wood will be offered at no cost to customers upon request.

Information is always available for Eversource customers:

- Resiliency program details are available on [www.eversource.com](http://www.eversource.com) or through Eversource's Customer Care Center at 800-286-2000 (or 860-947-2000 in Hartford/Meriden).

## Working together, we'll see results.

Here are a few ways you can help improve reliability:

- **Learn more** about planting the right trees in the right places at [www.eversource.com](http://www.eversource.com).
- **Slow down** for work zones and look for workers in the roadway.

# Improving Electric Reliability



Eversource's System Resiliency Program

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## Making Poles and Wires Stronger

### Structural Hardening

Utility poles will be upgraded on select circuits.

Eversource will:

- Install new, stronger poles that can withstand more severe weather, like hurricane-force winds capable of bringing down large, mature trees.
- Inspect poles to ensure they can support telephone and cable TV attachments, in addition to electrical equipment.
- Evaluate composite, or man-made, poles and crossarms to replace wooden equipment.



### Electrical Hardening

Wires will be upgraded along main and secondary lines that serve large numbers of customers.

On select circuits, Eversource will:

- Replace bare, copper wire with thicker, rubber-coated wire that is more weather- and tree-resistant.
- Install protective equipment to isolate power outages and reduce the number of customers affected by an outage.

## Reducing Damage from Trees

Resiliency program work includes a strategic schedule ensuring routine and enhanced tree trimming and removal.

### Routine Tree Trimming

Standard tree-trimming clearances from utility poles are:

- 8 feet to the side.
- 10 feet below.
- 15 feet above.

Eversource's qualified tree contractors will notify property owners in person or through information left inside door hangers.

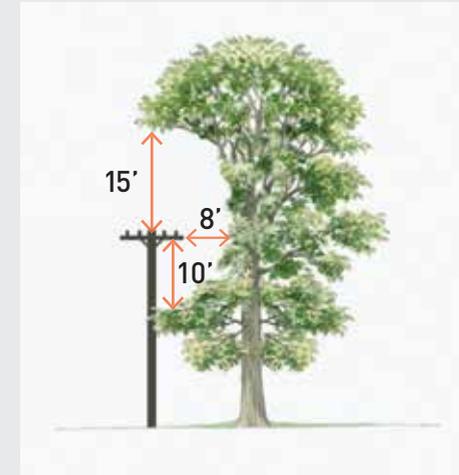
Ice accumulation of ¼-inch or more is considered hazardous to the electric system. Using thicker-gauge wires can help the system withstand three times more ice.

### Enhanced Tree Trimming and Removal

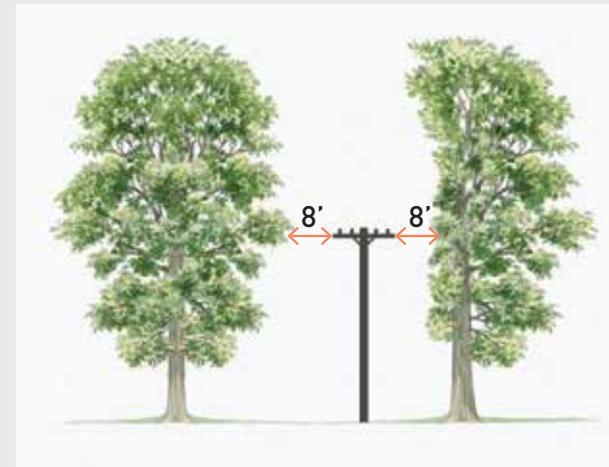
- The enhanced tree-trimming work includes the removal of weak, dead or diseased trees that can cause power outages if they fall.
- The standard clearance from utility equipment is 8 feet from the ground up. We remove all overhanging limbs; tall brush; and small, dead or diseased trees with the potential to cause outages.
- Eversource's qualified tree contractors will notify property owners in person or through information left inside door hangers.

For more information on Eversource's System Resiliency Program, please visit [www.eversource.com](http://www.eversource.com).

### Routine Tree Trimming



### Enhanced Tree Trimming and Removal



## Advanced Technology

Eversource's design and automation upgrades will help to ensure a quicker response when power outages occur. At selected locations, Eversource will:

- Automate substation equipment for remote control capability.
- Increase remote data collection to monitor operations with real-time technology.
- Evaluate existing circuit designs to improve performance under extreme weather conditions.

Beyond our everyday efforts, we're making an investment in our future and yours, to build a stronger electric system and deliver more reliable power.

