

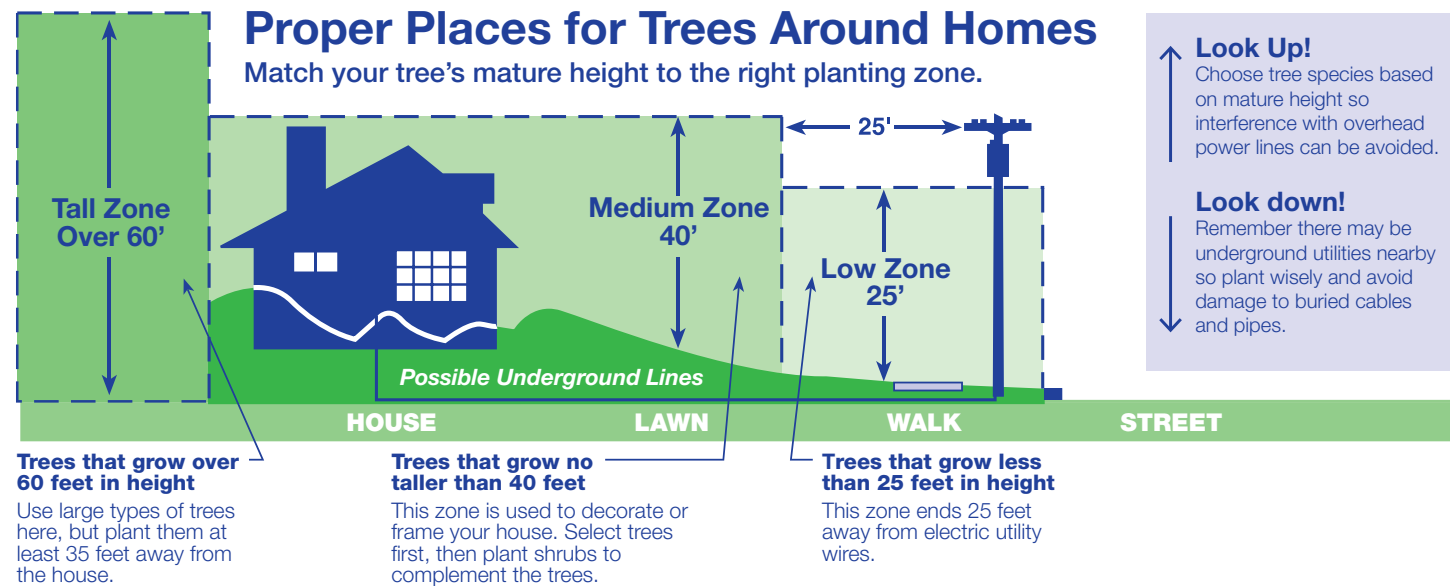


To learn more about our vegetation management efforts, please visit ngrid.com/trees

nationalgrid

For our residential customers in Massachusetts

Trees and Your Electric Service



Important Considerations

Selecting and Planting Trees

Determining where to plant a tree is a decision that should not be taken lightly. Remember to look up, as well as down, to determine where the tree will be in relation to both overhead and underground utility lines. The location of these lines will have a direct impact on your tree and planting site.

The ultimate mature height of the tree must be within the available overhead growing space. Proper tree species selection and placement will avoid future utility line conflicts and help ensure reliable service.

To help you select a type of low-growing, utility-compatible tree species to plant, we've compiled a list of recommended species for your use. Visit ngrid.com/trees for more information, or contact our Distribution Forestry Department at **1-800-322-3223**. By selecting the right tree for the right place, you'll not only add value to your property, but you'll help us avoid a future need to prune an improperly placed tree.



This is an important notice. Please have it translated.

Este é um aviso importante. Quiera mandá-lo traduzir.
Este es un aviso importante. Sirvase mandarlo traducir.
Avis important. Veuillez traduire immédiatement.
Questa è un'informazione importante, si prega di tradurla.
Это очень важное сообщение. Пожалуйста, попросите чтобы вам его перевели.
Đây là một thông báo quan trọng. Xin vui lòng dịch thông báo này.
這是一個重要的通知。請翻譯一下。
تمت جرت مهم راطخا انه .
এটি একটি গুরুত্বপূর্ণ বিজ্ঞপ্তি। অনুগ্রহ করে এটি অনূবাদ করে নিন।
Sa se yon avè enpòtan. Tanpri, fè li tradwi.
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Managing Vegetation to Ensure Electric Service Reliability

Trees and Electric Reliability

We serve over 1.3 million customers along 14,000 miles of electric distribution lines in Massachusetts that deliver the power you need and rely upon. Trees are an integral part of our lives. We estimate that our service lines are exposed to more than 2.5 million trees. When strategically positioned, trees can support energy conservation, though they may also increase the risk of service interruptions. When trees come in contact with and damage our overhead electric facilities, we have to address those situations to ensure your safety and service reliability.

Our Tree Pruning Program

At National Grid, we share your appreciation for trees and recognize their value to you and your community. Diseased or damaged trees, trees with structural defects, poorly performing species and trees growing in the wrong place frequently cause power outages when they make contact with our overhead electric lines. Our vegetation management program addresses trees along selected distribution feeder circuits on a five-to-seven-year cycle. Our professional utility arborists periodically review these feeders to keep trees a safe distance away. Since 2000, we have repeatedly earned national recognition for our tree pruning programs. The Arbor Day Foundation has recognized us as a **Tree Line USA** utility for our demonstration of excellence in tree care, annual worker training programs, commitment to public education and community tree

planting activities. We are among a select few utilities to earn this national honor.

Utility Pruning

The technique of “directional pruning” is commonly used to naturally direct trees’ growth away from overhead wires. This science-based pruning practice was developed in conjunction with the U.S. Forest Service and is endorsed by the International Society of Arboriculture, the Arbor Day Foundation and other tree care professionals around the world.

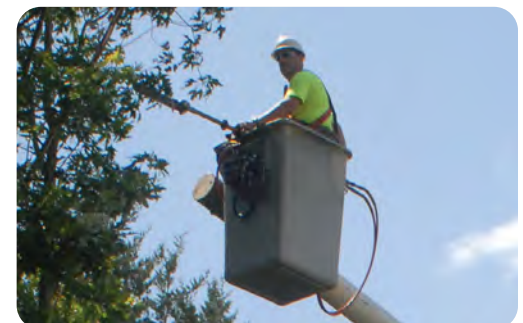
Our specifications are to maintain at least **10 feet of clearance** from the primary lines next to, above and below the primary conductors in residential, urban and maintained areas. Additionally, we maintain at least **15 feet of clearance** next to, above and below the primaries in rural and unmaintained areas, while secondary electric lines require at least **18 inches of clearance** on all sides. In order to properly conform to industry ANSI A300 pruning standards, it may be necessary to cut limbs beyond the distance specified to the correct points of limb attachment within the crown of the tree. Trees may initially look different following directional pruning, but this line clearance pruning practice allows them to remain healthy. Additionally, in rural and unmaintained urban areas under or immediately adjacent to our lines, we will cut small, volunteer or intrusive trees and tall-growing brush to prevent future vegetation

encroachment. Damaged, poorly structured trees or weak tree species may require additional pruning or removal. When appropriate, stump treatments with state and federally approved herbicides may be applied to prevent the regeneration of undesirable species, thus helping to reduce costs and the need for repetitive work in the future.

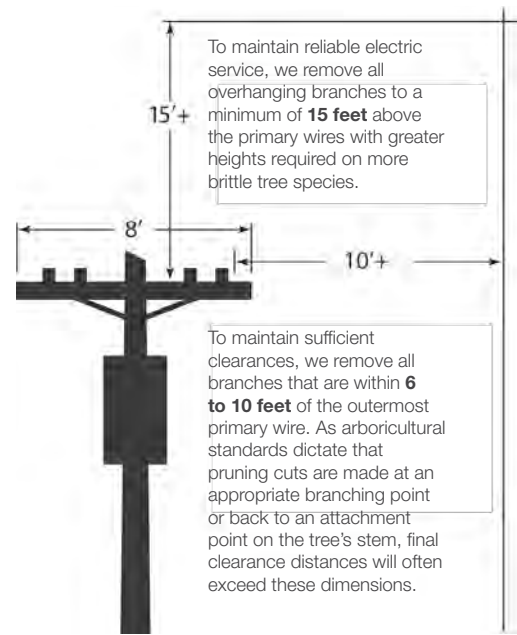
The Benefits of Directional Pruning

Directional pruning considers the natural structure of the tree to reduce the number of cuts required. While the size of the cuts in the work area may seem larger than was common in the past, fewer cuts mean better wound isolation and healing for the tree. The guiding principle of directional pruning is the “90-3-90” rule. Typically, 90 percent of the interfering branches can be removed by making three larger cuts within the tree crown 90 percent of the time. We work with the natural form of the individual tree as to where best to make our cuts, rather than simply shortening branches. “Round-overs” of the tree crown are no longer acceptable or practiced.

continued >



Primary Clearance Requirements



Proper Cuts

We use the “collar cutting” method to remove limbs. Properly placed cuts facilitate more rapid wound closure as the tree is better able to isolate the pruning cut. Research has found wound dressings to be ineffective and they are no longer applied.

Service Lines to Your Home or Business

We will remove limbs that are pressing on the service line to your property only at the time we perform cycle pruning of the feeders in your neighborhood. We will also assess the need for any additional clearance pruning of your service wire at that time. If you have a tree-line concern or question, please notify our customer service center at **1-800-322-3223**. Upon notice, we will send a qualified representative to investigate safety concerns and report on our assessment at the time of inspection.

Cleanup and Wood Disposal

As part of our regular vegetation management cycle, our teams will chip branches removed from trees in your yard, rake the area to collect smaller twigs and debris, and distribute sawdust. Pieces of wood that cannot be chipped will be cut into manageable lengths and left near the base of the tree. In off-road and unmanaged areas, wood and brush will be left windrowed along the edge of the right-of-way to naturally decompose and provide shelter benefits for wildlife. We will ensure that paths, drainage ditches, and stream channels within the work area remain clear.

Tree Removals Near Primary Lines

In an effort to improve and maintain service reliability, we periodically inspect critical portions of our primary lines supplying your neighborhood to target at risk trees that have a high probability of failure. Hazard trees that are considered for removal or additional pruning are typically beyond the edges of the areas we normally maintain. Not all trees require immediate attention, nor can all trees realistically be removed. We focus our efforts on the tree species and/or defects most likely to cause an outage in the most sensitive, critical portions of the distribution circuit.

Tree Removals Near Service Lines

We do **not** perform tree removals for customer service lines. OSHA and ANSI standards require that all tree work in the proximity of overhead electric facilities be completed by qualified individuals trained to recognize the hazards of working near energized lines. Should you need to have tree work completed on your property near overhead electric lines, ask your arborist if their employees receive such training. If not, we may provide the necessary services, and by law, the cost of this work may be billed to you and/or your contractor.

Emergency or Storm Response

During emergencies and storm situations, our teams are focused on clearing damaged trees and limbs from our electric lines and facilities to restore customer service, provide access for emergency crews, and ensure reliable future service. The cleanup of generated storm debris remains the responsibility of the tree owner, whether public or private.

Who Does the Pruning?

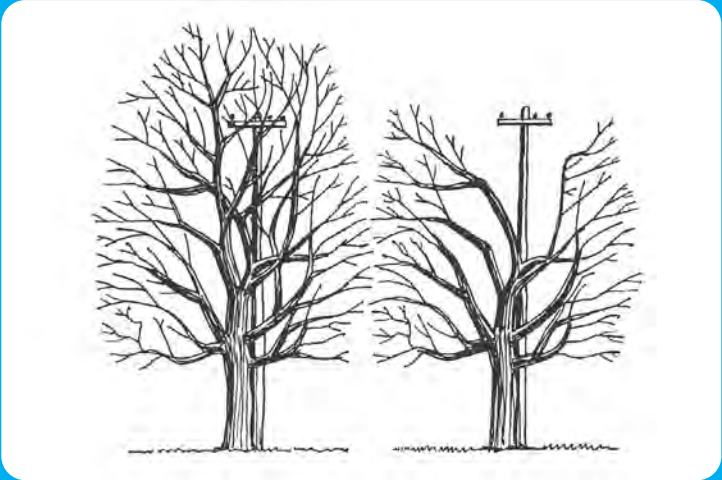
Our forestry department and/or approved utility tree contractors will carry out this work following the nationally recognized industry ANSI A300 pruning standards, safety practices, and quality guidelines.

In addition to ensuring service reliability, our vegetation management program strives to provide as much clearance as possible between trees and energized overhead lines for safety reasons, too. Open, visible lines help to protect our workers, customers and private contractors working near these lines by avoiding accidental contact. You can further safeguard yourself and others around you by:

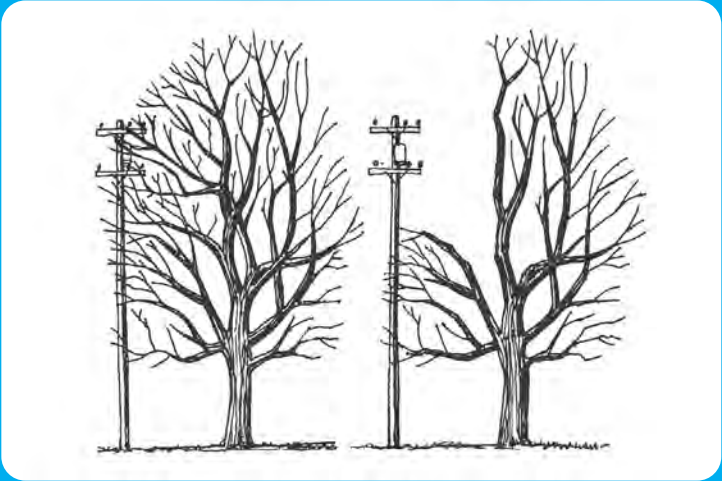
- ▶ Allowing our tree crews to complete their work to meet our clearance specifications
- ▶ Never operating tools or equipment within 10 feet of overhead lines
- ▶ Never allowing children to climb trees near overhead lines
- ▶ Never building a tree house in trees that are under or near power lines
- ▶ **Always** call **DigSafe** at **1-888-344-7233** before you plant a tree or dig on your property. Learn more at **digsafe.com**
- ▶ Never planting large-growing trees under or near overhead lines
- ▶ Avoiding planting trees or shrubs within five feet of underground electric distribution equipment to allow emergency access.

The following illustrations provide examples of the proper pruning for shade and ornamental trees.

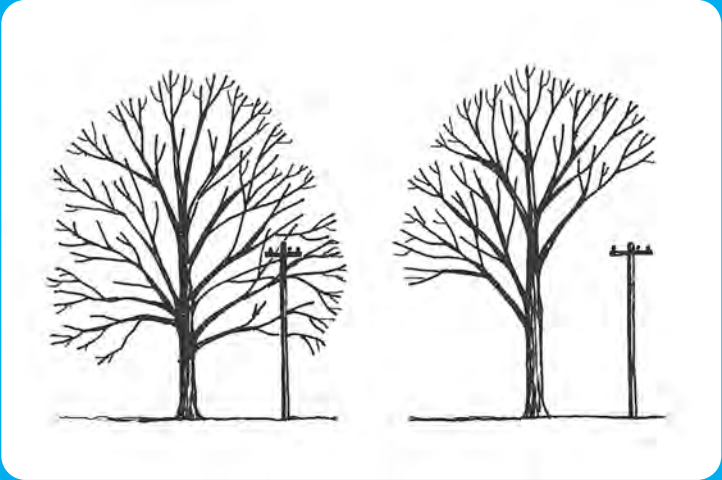
Through Pruning



Side Pruning



Under Pruning



Protect Your Trees and Your Service

We’re actively involved at local and state levels to help educate communities, professionals and individuals about how selecting the right tree for the right place can protect property and ensure reliable electric service.

Keeping tall-growing trees safely distanced from homes, buildings and power lines can prevent property damage and electric service outages that sometimes occur during periods of heavy snow, ice and windstorms.

For more information about selecting and planting the right tree near power lines, please visit: **ngrid.com/trees**.

Thank You for Your Help and Cooperation

We appreciate your understanding and cooperation. Together, we can work towards ensuring safe, reliable electric service and still enjoy the beauty, benefits and value of trees.

