Trees and Your Electric Service

Managing Vegetation to Ensure Electric Service Reliability

Trees and Electric Reliability
National Grid serves over 1.6 million customers along 36,000 miles of electric distribution lines in New York that deliver the power you need and rely upon. Trees are an integral part of our life. We estimate that our lines are exposed to over 12 million trees, and inevitably, the conflicts between trees and overhead electric lines that develop must be addressed to assure your safety and service reliability. Trees can help you save energy when properly located, but are also a leading cause of electric service interruptions by contacting and damaging our overhead electric facilities.

National Grid’s Tree Pruning Program
National Grid shares your concern and appreciation for trees. We recognize their value to you and your community. Diseased or damaged trees, those with structural defects, poor performing species and those growing in the wrong place frequently cause power outages when they contact our overhead electric lines. Our vegetation management program addresses trees along selected distribution feeder circuits typically on a five- to seven-year cycle. Our professional utility arborists periodically review these feeders and adjust our schedules to keep trees a safe distance away. Since 2000, National Grid is proud to have repeatedly earned national recognition for its tree pruning programs. The National Arbor Day Foundation has recognized National Grid as a “Tree Line USA” utility, through its demonstration of excellence in tree care, annual worker training and a commitment to public education and community tree planting. We are among a select few utilities to earn this prestigious national honor.

Utility Pruning
The technique of “directional pruning” is most commonly used to attempt to naturally direct trees growth away from the 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 National Arbor Day Foundation and other tree care professionals around the world.

Our specifications are to maintain at least 10 feet of clearances from the primary lines next to, above and below the primary conductors in residential, urban and maintained areas and 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 trees 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 even removal. Stump treatments with State and federally approved herbicides may be applied (when and where appropriate) to prevent the regeneration of undesirable species, thus helping to reduce costs and 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 in the work area.
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.

Proper Cuts
Crews will 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
National Grid 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, and we will 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 1-800-642-4272. Upon notice, we will send a qualified representative to investigate safety concerns caused by trees near our primary lines and report on our assessment at the time of inspection.

Clean Up and Wood Disposal
Crews will chip the branches they remove from trees in your yard as part of our cycle pruning program and rake the work area to pick up smaller twigs/debris and disperse 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. Paths, drainage ditches and stream channels within the work area will be kept 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. These “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
National Grid does NOT perform tree removals for customer service lines. New York state law requires that all tree work in the proximity of overhead electric facilities be completed by 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, National Grid may provide the necessary services and, by law, can charge you and/or your contractor for the service provided.

Other Tree Related Services
In emergency or storm situations, National Grid is responsible for ONLY clearing damaged trees and limbs from our electric lines and facilities in order to restore customer service, allow reasonable access for emergency restoration crews or to ensure future service reliability. The cleanup of generated storm debris remains the responsibility of the tree owner, whether public or private.

Who Does the Pruning?
Either National Grid’s forestry department and/or approved, utility tree contractors will be used to complete the work, conforming to the same nationally recognized industry ANSI-A300 pruning standards, safety practices and quality.

Your Safety Service reliability is not our only concern. 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 your family 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 being sure to “look up before you go up” and always call “Dig Safely New York” at 1-800-962-7962 before you plant a tree or dig on your property.
Not planting large-growing trees under or near overhead lines…and please don’t plant trees or shrubs near underground electric distribution equipment boxes on your property.

For Your Future Protection
National Grid is active at the local and state level in educating communities, professionals and individuals in selecting the “right tree for the right place”. Failure to select and plant the appropriate species and to provide adequate growing space from overhead electric lines eventually leads to the need for unwanted tree pruning or removals.

Tall-growing trees planted too close to homes, buildings and power lines frequently leads to property damage and electric service outages during heavy snow, ice and severe wind storms.

For more information about selecting and planting the right tree near power lines, please call our Customer Service Center at 1-800-642-4272 or visit the “Safety” section of our website at www.nationalgridus.com to download a list of appropriate trees to plant (“How To Avoid Tree and Utility Conflicts”).

Thank you for Your Help and Understanding
National Grid appreciates your understanding and cooperation. Together we can work towards reliable electric service and still enjoy the beauty, benefits and value of trees.
When Selecting and Planting Trees

Determining where to plant a tree is a decision that should not be taken lightly. Many factors need to be considered prior to planting. When planning what type of tree to plant, remember to look up, as well as down, to determine where the tree will be located in relation to both the 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 to be planted must be within the available overhead growing space. Proper tree species selection and placement will assure the avoidance of utility line conflicts in the future.

To help you select a type of low growing, utility compatible tree species to plant, National Grid has compiled a list of recommended species for your use. Download a copy from our Safety Section on our website www.nationalgridus.com, or contact our Distribution Forestry Department at 315-428-5987.

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 “the wrong tree in the wrong place”.

National Grid is an international energy delivery company. In the U.S., National Grid delivers electricity to approximately 3.3 million customers in Massachusetts, New Hampshire, New York and Rhode Island and manages the electricity network on Long Island under an agreement with the Long Island Power Authority (LIPA). It is the largest distributor of natural gas in the northeastern U.S., serving approximately 3.4 million customers in Massachusetts, New Hampshire, New York and Rhode Island. National Grid also owns over 4,000 megawatts of contracted electricity generation that provides power to over one million LIPA customers.