

## BTES VEGETATION MANAGEMENT PROGRAM GUIDELINES

Vegetation management near power lines, fiber optic equipment, and underground utilities is critical for BTES to deliver safe and reliable services. BTES' goal is to reduce outages and the costs associated with restoring service while maintaining our area's natural beauty and providing for the safety of our customers and employees. While trees enhance our landscape, trees planted in the wrong place or not properly maintained can cause safety hazards and disruption of services. In fact, trees growing into or too close to the power lines is our largest cause of electric outages each year. BTES (and therefore our customers) spends millions of dollars each year on vegetation management, and that's not counting the expense to restore outages caused by trees or our customers' inconvenience from outages.

As a property owner, you have the right and responsibility to take care of your landscape. BTES and our contractors reserve the right to access properties to ensure the reliability and safety of services, to control costs associated with emergency repairs to downed utility lines, and/or to conduct maintenance and/or vegetation management. BTES and our contractors maintain the right to trim or take down vegetation according to the guidelines herein.

### EXCERPT FROM BTES RULES & REGULATIONS

Customer shall control the new and existing trees, shrubbery, vines, and other vegetation and placement of obstructions so as to prevent interference with overhead and underground utility lines and other BTES facilities. In the event such facilities are interfered with, BTES reserves the right, in accordance with BTES' Vegetation Management Program Guidelines, to trim, cut, remove, or otherwise control or inhibit the growth of any vegetation and/or obstructions by use of equipment, approved substances, or other means. Further, in the event such facilities are interfered with, impaired in their operation, or damaged by Customer, or by any other person when Customer's reasonable care and surveillance could have prevented such, Customer shall indemnify BTES or any other person against death, injury, loss, or damage resulting therefrom. Customer is financially responsible for BTES' cost of trimming or removing vegetation and/or obstructions, as well as repairing, replacing, or relocating any facilities as determined by BTES that are necessary as a result of said vegetation or obstructions.

### PLANTING TREES

We need your help in maintaining safe and healthy spaces between trees and power lines. When planting new trees, choose the right tree for the right place. First, consider what to plant and its future size at maturity. View our [Tree Planting Guide](#) for more information. Next, consider where to plant and do not plant your tree too close to any of BTES' equipment. Third, consider spacing – especially near power lines. Give your tree room to grow to its full height and width safely. And be careful. Call 811 before you dig to locate any underground utilities.

### TYPES OF VEGETATION MANAGEMENT

BTES' Vegetation Management Program is comprised of five general functions including: Taking Trees Down, Trimming, Power Outage Cutting, Customer Arranged Cutting, and New Construction Clearing.

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#### TAKING TREES DOWN

- BTES and our contractors place an emphasis on taking trees down in lieu of periodic maintenance and recurring vegetation management operations.
- Trees that are located within the right-of-way and/or pose a threat to BTES' facilities may be taken down.
- BTES conducts vegetation management year-round on a planned cycle every four to five years.
- When a property owner's tree is taken down, wood that is too large for the chipper is cut into manageable lengths and left on the property, near the base of the tree. Disposal or use of all such wood is the property owner's responsibility.
- The property owner's tree stumps will not be removed when taking down a tree. If requested in advance, the stump will be cut at a height to allow removal of the stump by the customer or will otherwise be cut as low as possible.
- BTES may offer customers a low-growing replacement tree in exchange for taking down existing trees that are obstructing or otherwise endangering BTES' facilities through its [Trade a Tree Program](#).

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## TRIMMING

- The [lateral pruning method and directional pruning](#) shall be employed by BTES' contractors during cycle vegetation management operations performed on BTES' rights-of-way.
- Trees and other vegetation that pose a potential hazard to primary power lines will be trimmed or taken down. Sometimes this means trimming or taking trees down on private property.
- Trees will be trimmed to achieve the necessary clearance in order for the customer to be able to maintain at least 10 feet of clearance. Trees may be removed to achieve 100 feet or more of clearance depending on the right-of-way, type of power line, and location. Limbs overhanging lines will be trimmed as high as possible.
- BTES and its contractors follow guidelines as set by the [National Arbor Day Foundation](#).

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## POWER OUTAGE CUTTING

- During a power outage, our primary responsibility is to restore power as quickly as possible.
- BTES crews will take down, cut, or trim the property owner's vegetation in order to safely and quickly access facilities and perform work for restoration.
- BTES does not remove the property owner's brush, debris, and/or trees that are cut during outage restoration. Cleanup, disposal, and/or use of brush, debris, and/or trees from the property owner's vegetation is the property owner's responsibility.

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## CUSTOMER ARRANGED CUTTING

- BTES' Vegetation Management Program does not include provisions for trimming or taking trees down which interfere with low voltage service wires. However, in the interest of safety, BTES may, with prior arrangement, de-energize these lines and temporarily lower them to the ground to allow the customer to conduct vegetation management.
- Once the customer has finished their vegetation work, BTES will reconnect the customer's service line.

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## NEW CONSTRUCTION CLEARING

- BTES arranges with customers the path for new electric service to be installed.
- The customer is responsible for taking trees down and clearing all other vegetation prior to the installation of services.
- The customer is required to keep the areas around BTES' overhead and underground facilities maintained and clear from future growth in accordance with the guidelines provided herein.

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## FOLLOWING VEGETATION MANAGEMENT

Once an area around BTES' facilities has been identified as cleared by a BTES representative, the customer may be financially responsible for any tree trimming, taking down of trees, and/or vegetation management from that point forward. As per the [BTES Tree Planting Guide](#), no trees shall be planted or otherwise permitted to grow within the "No Tree Planting Zone" and all vegetation should be maintained such that it does not enter into the "No Vegetation Zone."



## DETAILS

### RESPONSIBILITIES

As a property owner, you have the right and responsibility to take care of your landscape. BTES customers shall control new and existing trees and shrubbery, and the placement of obstructions, to prevent interference with overhead and underground utility lines, fiber optic lines, and other BTES facilities. In the event such facilities are interfered with, BTES reserves the right to trim or take down any vegetation and/or obstructions. Interference may include vegetation that is closer than ten feet (or more depending on the right-of-way) to BTES' facilities or prevents access and/or visibility of BTES' facilities. The customer is financially responsible for BTES' cost of trimming or taking down vegetation and/or obstructions, as well as repairing, replacing, or relocating any facilities as determined by BTES that are necessary because of said vegetation or obstructions.

### IVM

BTES and our contractors utilize an [Integrated Vegetation Management \(IVM\)](#) approach that complements mowing and pruning with an effective combination of herbicides to inhibit the growth of underbrush, vines, and other vegetation. BTES and our contractors use EPA-approved herbicides according to the manufacturer's directions and in strict accordance with federal and state regulations. BTES and its contractors utilize practices that are consistent with ANSI A300 Part 7.

### GROUND-MOUNTED EQUIPMENT

Trees, shrubs, fences, large landscape rocks, or other obstructions are not permitted in access areas above or around BTES' buried or [ground-mounted equipment](#). A minimum of ten (10) feet of clearance in front and a minimum of three (3) feet of clearance on each side and the back must be maintained around all pad-mounted transformers (unless otherwise posted). Before conducting any digging, call 811 at least 48 hours in advance to have your underground utilities marked.

### TRADE A TREE PROGRAM

BTES places a greater emphasis on taking trees down rather than recurring trimming. BTES may offer customers a low-growing replacement tree in exchange for taking an

existing tree down that is obstructing or otherwise endangering BTES' facilities through its "Trade a Tree Program." BTES strongly believes that the costs associated with the Trade a Tree Program are justified compared to the benefit of reduced maintenance costs which will result from a decrease in time spent repairing downed lines and performing recurring vegetation management operations. Based on the situation, costs, and availability, BTES will coordinate with the customer to determine the quantity of replacement trees per location. Considering the above, BTES has taken the following steps for its Trade a Tree Program:

- a) Through a competitive procurement process, BTES selects a nursery to perform the necessary tree plantings in connection with this program.
- b) Selected employees, authorized by BTES, may discuss potential trees that qualify for this program with property owners. The trees taken down will be in the best interest of the customer and BTES to help avoid costly maintenance. In general, these trees are located underneath or in close proximity to overhead circuits.
- c) BTES provides the preapproved nursery with a listing of all property owners and respective locations for seasonal planting scheduling. The preapproved nursery will professionally install a white Dogwood tree (subject to availability) at a location satisfactory to both BTES and the affected property owner.

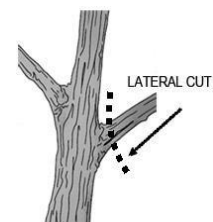
### PRUNING METHODS

During cycle vegetation management, BTES' contractors will use the lateral pruning method (as shown on the next page). The lateral pruning method is the process of removing the target branch back to the closest lateral branch or limb that is growing away from the overhead power line. In this manner, the lateral branch left on the tree will redirect the growth of the tree while reducing sprouting. Since the lateral is already attached to the branch by several growth rings, the branch is much stronger. The corresponding wound on the branch is much smaller and easier to heal, reducing the possibility of decay or disease. In short, lateral pruning has the following inherent advantages:

- a) Directs growth away from the overhead lines
- b) Healthier than “rounding-over” which weakens the tree with randomly placed cuts and promotes rapid and vigorous sprouting around the stubs
- c) Refines and improves the natural shape of the tree and reduces future pruning
- d) Endorsed by [national arboricultural authorities](#)

## LATERAL PRUNING

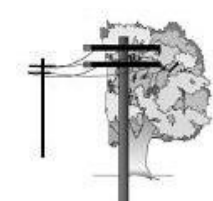
The method of tree topping is no longer recommended by horticulturists and other professionals in the field, such as the [National Arbor Day Foundation](#) and [The International Society of Arboriculture](#). Tree topping or “rounding over” can lead to decay, disease, insects, and fungi, and may threaten the life of the tree. Weakened trees are more likely to break during wind, ice, and snowstorms.



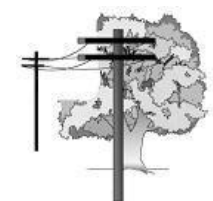
Lateral, or natural trimming, is the method used by line crews in most utilities. The name “lateral” is derived from the method of cutting branches back to natural strong points on the tree, such as the juncture of the trunk and major limbs. Re-growth occurs with lateral trimming; however, branches tend to grow away from power lines and profuse sprouting of new limbs into power lines is avoided.



“V” pruning is used for fast growing trees located directly under power lines when removal or crown reduction is not an option. No branches are left hanging over the lines with V pruning.



Side pruning involves pruning the branches growing toward the lines on one side of the tree only. Any tree that has its base located 15 feet or more away from the center line of BTES conductors may be side pruned.



“L” pruning is practiced when tree limbs cannot be pruned to a suitable lateral. This method of pruning involves pruning the branches which grow toward power lines on one side of the tree only.

## CUSTOMER-HIRED CONTRACTOR

If a customer, at his or her own expense, hires a professional contractor to perform the vegetation management of the property owner’s vegetation, the professional contractor must perform the services in accordance with the BTES Vegetation Management Program. Contractors should be qualified to perform work in the vicinity of power lines, be insured, and assume responsibility for any costs incurred by BTES due to the work performed by the contractor, including but not limited to, repairs to BTES’ facilities. BTES is not responsible for reimbursement of any related expenses.

## SERVICE CONDUCTORS

BTES and our contractors do not trim or take down vegetation and/or trees located near or growing into low-voltage service lines to customers’ residences or places of business. Since energized service conductors are insulated and thus unlikely to cause an outage which would affect multiple customers, BTES concentrates its vegetation management efforts on its high voltage overhead lines, the majority of which consists of bare and exposed energized components which are insulated by air and distance. Should inadvertent contact occur between BTES’ high voltage overhead lines and surrounding trees, a power outage is likely to occur which could affect multiple BTES customers. Due to this fact and based upon BTES’ commitment to its customers to provide safe and reliable services with due consideration to matters of good economy, BTES elects not to perform vegetation management near low-voltage service wires. However, in the case of endangered low-voltage lines, BTES may with prior arrangement, lower these lines to allow the customer to perform these vegetation management operations. Upon completion by the customer, BTES will reconnect the service conductors.

