CITY OF CONCORD TREE TRIMMING POLICY

SECTION - 1 - GENERAL PROVISIONS

The following guidelines are used to help determine which vegetation is to be trimmed or cut away from existing overhead distribution lines. All line clearing shall comply with the requirements given by OSHA and ANSI Z 133.1 - 1988.

1.1 Primary Circuits, Rural Lines

Right-of-way in rural areas is more or less 30 feet wide, i.e., 15 feet on either side of the centerline of the primary facilities, except as may be otherwise defined by either the Right-of-Way or by an on-site inspection. Any question as to a deviation from 30 feet will be resolved by the City. All vegetation on the right-of-way should be removed except an occasional low-growing species such as dogwood and red bud which may be left for aesthetics, provided simple clearance is assured and access is in no way impaired.

1.2 Primary Circuits - Yard and Urban Lines

Vegetation should be removed or trimmed back to the extent at which has been previously maintained. Any deviation will be with the property owner's prior knowledge. Effort should be made to obtain 15 feet of clearance on each side of the line while maintaining an aesthetically acceptable appearance in the neighborhood. Use of professionally acceptable pruning techniques and promotion of landscape alternatives are expected.

1.3 Secondary Circuits Other Than Multiplex Cables

Vegetation should be cut or trimmed back to the extent at which it has been previously maintained. Any deviation will be with the property owner's prior knowledge. Effort should be made to obtain a 5 foot radial clearance path around the line. Professional and aesthetical considerations are to be observed as previously stated.

1.4 Secondary Circuits - Multiplex Cable Services and rental lights

Maintenance clearing on any secondary multiplex cable service, rental lights, or street lighting is only performed by customer request or as needed to maintain electric system integrity. Vegetation will be trimmed back to a point where it is no longer contacting electric system hardware. Any trimming beyond this point will be the responsibility of the property owner. The City will temporarily "drop" the line so that a property owner may remove limbs or trees.

1.5 Professional and aesthetical considerations are to be observed as previously stated. Every effort will be made to contact the owner or resident by door hanger or personal contact prior to any tree trimming.

SECTION - 2 - REVIEWING CUSTOMER TREE REQUESTS

2.1 <u>Tree Removal</u>

- We will remove any trees growing within fifteen foot either direction of centerline (utility poles) of electric distribution lines. We will remove all limbs and leave trunk and wood on property cut into lengths agreed upon by property owner.
- We will remove any trees growing within twenty-five foot either direction of centerline (utility poles) of electric transmission lines. We will remove all limbs and leave trunk wood on property cut into lengths agreed upon by property owner.
- Requests to remove trees outside of electric right-of-way widths will be reviewed
 on a case by case basis. The City of Concord Electric Department reserves the
 right to deny or approve the removal of trees outside of our right-of-way widths.
- We will not remove trees for electric service drops. The customer may schedule a time to have their electric service drop temporarily disconnected to remove a tree.

• Tree Trimming

- We will trim all trees away from electric distribution lines to obtain sufficient clearance for three to five years of regrowth.
- We will trim all trees away from electric transmission lines to obtain sufficient clearance for five to eight years of regrowth.
- We will trim electric service drops to a point where no limbs are in contact with the service drop.

Other vegetation

• All attempts will be made to remove shrubs, grass, or vines that interfere with access to City of Concord Electric System hardware or utility space.

2.2

Consideration of customer requests is based on the extent of possible danger to municipal facilities, the likelihood of service interruption to other customers, and accessibility for workers and equipment.

2.3 The Scheduling of a customer request is dependent in part on higher priority work and the extent of danger posed by the tree.

SECTION - 3 - TREE TRIMMING STANDARDS

All trimming, both initial and re-trimming, shall be executed in accordance with established, sound principles of tree care. It shall combine emphasis on tree health and satisfactory clearance for power lines.

3.0 Guidelines

- 3.1 All branches or limbs should be cut flush with the supporting trunk or limb. This cut should not be made to create an unduly large open area, but should be cut far enough away from the main branch to leave the branch collar intact. To avoid splitting back the branch and tearing the bark, three cuts should be made: An undercut is made approximately a foot away from the limb junction. The limb is "stub cut." The final cut is made at the crotch, leaving as small a wound as possible. See Standard for Natural Target Pruning.
- 3.2 When only a portion of limb is to be removed, the portion removed should be cut back flush to limb at least one-third the diameter of the portion removed.
- 3.3 Suitable tools and equipment shall be used and shall be kept in good working condition at all times.
- 3.4 Climbing spurs shall not be used unless the tree is to be removed or unless emergency action is required.

SECTION - 4 - CLEARANCES

Clearance shall be sufficient to allow the line to function properly without causing unnecessary damage to tree and shall comply with the requirements given by OSHA and ANSI Z 133.1 - 1988.

4.0 Guidelines

- 4.1 <u>Right-of-Way Clearances:</u> When re-clearing, the right-of-way should be restored to its original width. In cases where the initial width was less than 30 feet, an effort should be made to obtain additional clearance with customer's approval.
- 4.2 <u>Tree Trimming:</u> Trees shall be trimmed to obtain a minimum of three year's clearance. Where trees have been "rounded over" for years

and these clearances cannot be obtained without severely mutilating the tree, every effort will be made to obtain customer authorization to remove the tree. Where these trees cannot be removed, natural trimming methods should be employed to avoid excessive stump sprouting.

- 4.3 <u>Special Clearances:</u> Down guys and span guys shall be free of weight, strain, or pressure from trees. Vines on poles and guys shall be cut. Working clearance from trees shall be obtained around transformers, crossarms, and risers.
- 4.4 <u>Dead Wood:</u> All dead wood shall be removed that may, under any circumstances, contact primary conductors. Dead limbs that are potentially hazardous to traffic or pedestrians will also be removed during line clearance operations as an additional safety feature. Dead limbs previously pruned by the Electric Department shall be removed.
- **4.5** <u>Wood Disposal:</u> All brush produced on the jobsite must be disposed of as referenced below:

Brush less than eight inches in diameter is to be chipped and removed from the jobsite.

All wood larger than eight inches in diameter shall be cut into lengths agreed upon by the owner and left on jobsite.

SECTION - 5 - TYPES OF TREE TRIMMING

Tree trimming is herein subdivided into four general types; top, side, under and through. These four types have been generally accepted as they relate to overhead line position with respect to tree crowns. Individual trees and tree species have definite growth habits which tend to lend themselves best to one or more of these four types of trimming. Familiarity with these growth habits proves very helpful in trimming individual trees, and in planning new overhead lines in tree zones.

"Natural" pruning, in all four types of three trimming procedures, is defined as making all cuts at laterals (limb junctions). "Directional" pruning involves cutting back to laterals which are growing away from the conductors. We can effectively control the re-growth of the tree, and minimize our tree/line clearances by combining "natural" trimming as the positive effects it will have on the health of the tree. The tree is much less likely to suffer wood decay problems in the future if stubs are not left.

5.1 Top Trimming

Topping is cutting back the entire upper crown and is generally required when a tree stands in close alignment with a primary pole line. It may sometimes be necessary, for appearance sake, to trim some of the longer side limbs back during top trimming. It is recommended that, when top trimming a tree, it be done through "natural" trimming methods as opposed to "rounding-over." Although it may be impractical to "naturally" trim many of the existing "round-overs" currently found on our system, there is an opportunity to initiate "natural": trimming procedures on young trees in need of top trimming. "Rounding-over" usually causes a short trim cycle to ensue due to rapid sucker growth resulting from the stub cuts. Good practice indicates that shade trees should initially be topped back no more than approximately one-fourth of their existing crown heights.

5.2 Side Trimming

Side trimming is the shortening back or complete removal of side limbs that project toward conductors located to one side of the tree alignment. Limbs overhanging the conductors should, under most circumstances, be removed so as to provide better protection for the lines during adverse weather conditions. Avoid side trimming trees back to an imaginary vertical line, arbitrarily stubbing limbs back to a certain point. Utilize natural trimming methods and evaluate where each individual limb should be pruned. Basing cuts on the branching habit of each limb will promote better health for the tree as well as provide a job with a more natural appearance.

5.3 Under Trimming

Under trimming is the cutting of limbs and branches back to a major tree trunk to provide conductor or clearance below the tree crown. Frequently for good balanced crown appearance, limbs on the opposite side of a tree may also be removed. Use caution and avoid large cuts encircling the tree trunk that may have a girdling effect.

Under trimming should be avoided when possible. The results of under trimming are overhanging limbs which can negatively affect reliability. Conditions conducive to under trimming would be strong wooded species, like large oaks along main thoroughfares, which may be highly visible to the public.

5.4 Through Trimming

Through trimming is the removal of limbs and branches from inner tree crowns to make room for the passage of conductors.

5.5 Combinations

It is frequently necessary to combine two types of trimming for best conductor protection and tree appearance. Future re-trimming will be made easier and less costly by the application of "natural" and "directional" trimming techniques.

SECTION - 6 - CUSTOMER NOTIFICATION

Recommended Basic Right-of-Way Maintenance Practices

In order to maintain adequate distribution right-of-Ways and service reliability and to maintain proper respect for our customer's property, as well as to minimize tree-related damage claims against the City, the following basic operating practices should be followed:

6.0 Guidelines

6.1 <u>Customer Notification</u>

a. Make a reasonable effort to notify customers of the City's intentions to trim, especially on yard trees which have not previously been trimmed. This effort may include knocking on their door or leaving a door hanger stating the City's intentions. After reasonable notification efforts have been made, proceed with the appropriate trimming. Good judgment should always be exercised in determining the appropriate steps of customer notification. Based on sound judgment it may not be necessary to make any contact with a customer in rural non-residential areas or in many cases where the right-of-way has been systematically cleared to a certain width during the past maintenance cycles.

- b. Should the customer object to the work unit doing necessary trimming and it cannot be resolved by the crew, supervision shall be notified and they shall attempt to convince the customer that the work must be completed.
- c. Should the customer still object, management/supervision should take whatever steps are required to assure that necessary trimming is done. The City has a responsibility and a right to obtain proper line clearance.
- d. Customer concurrence will normally be required in the case of tree removal or right-of-way widening beyond 30 feet (or the previously agreed upon width).

6.2 Customer Requests

Justified customer requests for tree trimming/removal, that meet guidelines, should normally be done when a work unit is scheduled to be in the immediate area. Emergency situations such as tree conditions which are threatening immediate danger to customer service, public safety or City equipment will be exceptions to efficient work unit scheduling. Customer requests are covered in Section 2.

6.3 Change in Trimming Methods Notification

Every attempt should be made to utilize industry accepted trimming methods on trees that have been improperly trimmed in the past. . Where customer objections to these methods is severe, explanations shall be made in an effort to educate the customer that the trimming procedures advocated by the City are based on arboriculturally sound principles and in actuality are the best techniques for the health of the tree.