Exhibit A

CITY OF TALLAHASSEE ELECTRIC

PROCEDURES MANUAL

FOR

UTILITY GENERAL PERMIT

August 1, 2021

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Introduction

Safe, reliable electrical service cannot be provided to our customers without periodic tree trimming and rights of way maintenance. City of Tallahassee (COT) Electric pledges to perform all aspects of this work in accordance with the guidelines established in this manual. All tree trimming procedures will abide by ANSI A300 200 I standards and the International Society of Arboriculture Pruning Guidelines (sec appendix 5,8). This procedures manual describes the procedures that will be followed by the COT Electric in activities authorized by the Utility General Permit. This includes maintenance of existing electrical facilities as well as construction of new electrical facilities.

This procedures manual pertains to the following work, which is performed by the COT Electric Department and/or its contractors:

- 1. Vegetation management and maintenance of existing overhead and underground power lines.
- 2. Vegetation management and erosion control for the construction of overhead and underground power lines as well as the relocation of existing facilities performed concurrently with permitted development activity.
- I. Vegetation Management for Maintenance of Existing Overhead Lines
- A. <u>Distribution Maintenance Trimming in all areas except Canopy Roads,</u>

 <u>Special Development Zones. Flood Plains, Conservation or Preservation</u>

 Areas and Wetlands:

Tree trimming on a circuit basis (trimming from the substation to the end of the electrical line) is required to maintain proper clearance for existing electrical facilities in order to provide reliable electric service. All circuits are scheduled for trimming on a regular thirty-six -month trim cycle. This work consists of trimming trees to provide10-12 feet of clearance on each side of the outermost wire and removing overhanging trees and limbs 10-12 feet above the lines which are the major cause of disruption of electric service. This overhead clearance will be maintained at that distance in order to provide "storm hardening" for the electric system. The trim cycle is based on the growth rate of trees in the Tallahassee area, the size of the COT Electric service area, and is contingent upon the availability of funds.

The COT Line Clearance Contractor will attempt to notify each property owner contiguous to the work area to be preformed of COT Electric's intent to trim. For all homes and busnesses not directly contacted, the Contractor will leave a written notification (door hanger) of the intent to perform required trimming. This notice will include a telephone number for customer inquiries. If there is no inquiry within 3 working days, the tree trimming operation will proceed.

In the past, trees growing under the overhead lines have been topped out to prevent them from growing into the lines. This practice results in deformed and unsightly trees and faster growing sprouts growing back into the lines. To remedy this situation, tall growing tree species growing beneath the overhead lines, those trees that have been previously topped out and cannot be professionally maintained, hazardous trees, and dead or dying trees will be selectively removed. During the previous trim cycles, we have removed most of these problem trees during normal maintenance operations. Occasionally we are requested by property owners to remove trees as described above. If any protected tree (see appendix 5) on county rights of way falls into one of the categories above, Leon County Growth and Environmental Management (GEM) will be contacted for approval before removal. Replacement for these trees will be in accordance with LDC section I 0-4.364 (5)(b). Removal of trees on residential or commercial property will conform to the requirements or LDC section I 0-4.362 and 10-4.364. Replacement of trees will be limited to native species or trees identified within Appendix 3 (Recommended Trees for Planting near Overhead Power Lines)

B. <u>Canopy Road Tree Protection Zones</u>

Canopy Roads are historically and aesthetically important to the citizens of Tallahassee. The following roadways, within the electlic service territory of the City of Tallahassee, are identified as Canopy Roads. The Canopy Road Protection Zone (CRPZ) includes all lands within 100' of the centerline of these designated roadways.

- 1. Meridian Rd. from Seventh Ave. to the state line.
- 2. Centerville Rd. from Seventh Ave. to SR 59.
- 3. Miccosukee Rd. from Capital Circle NE to Moccasin Gap Rd.
- 4. Old St. Augustine Rd. from Lafayette St. to W.W. Kelly Rd.
- 5. Old Bainbridge Rd. from Raa Ave. to Capital Cir NW.
- 6. Sunny Hill Rd. From Thomasville Rd to Old Centerville Rd. (No COT Electric Facilities)
- 7. Old Centerville Rd. from Centerville Rd. to State Line. (No COT Electric Facilities)
- 8. Pisgah Church Rd. from Bradfordville Rd to end of ROW. (No COT Electric Facilities)

Due to the importance placed on Canopy Roads by the community COT Electric pledges to maintain the canopy wherever possible. Except as noted below, this consists of trimming trees to provide 4'-6' of clearance around the overhead power lines. All limbs, regardless of size, that are dead, diseased, or which pose a safety hazard or threaten to cause disruption of electric service, will be pruned No tree within the CRPZ will be removed without a separate environmental permit or approval from Leon County GEM or their designee.

C. Wetland Areas, Special Development Zones and Floodplains

Vegetation management for maintenance of existing overhead lines in wetlands will be consistent with the procedures and guidelines listed above except that care will be taken to preserve wetlands at and below ground line. No heavy machinery will be used within a wetland area without proper precautions to protect the root mat. No tree within wetland will be removed without a separate environmental permit or approval from Leon County GEM or their designee.

II. Vegetation Management tfor Overhead and Underground Line Construction and Extensions

<u>In all areas except for Canopy Roads Special Development Zones.</u>, Flood Plains, <u>Conservation or Preservation Area and Wetlands:</u> This consists of mowing, trimming, and/or removing trees to provide 10 to 12 feet of clearance above the uppermost conductor, and 10 to 12 feet to the side of the outermost wire for the line that is being constructed or extended. COT Electric will strive to route the lines in such a manner that, where possible, removal of protected (sec Appendix 5) trees will be avoided. If it is necessary to remove protected trees the Leon County GEM will be contacted for approval before removal. When protected trees are removed, replacement trees (sec Appendix 3, Recommended Trees for Planting Near Overhead Power lines) will be planted or an appropriate donation to the Leon County Tree Bank will be made. An Environmental Management permit will be required for overhead (OH) line extensions that extend more than 3,000'.

Clearance requirements for underground line extensions can generally be reduced from that described for overhead lines. Directional boring (trenchless) will be used when necessary to avoid the removal of a significant tree. Any underground (UG) line extensions longer than 3000' will also require a separate Environmental Management Permit.

B. Canopy Road Protection Zones, Wetland Areas, Special Development Zones, and Floodplains.

All new construction or extensions in or through these areas will require a separate Environmental Management Permit.

III Tree Trimming Procedures and Methods

A. Trimming Methods

Tree trimming operations conducted on Tallahassee Electric distribution lines will be limited to 10 to 12 feet of clearance above primary voltage lines and 10 to 12 feet to each side of the outermost conductors and will be performed using one of four (4) general methods: (I) Vertical (side trimming), (2) Natural (directional), (3) Drop-V, and (4) Crown Reduction.

Each tree is a separate case and will be treated as such. The growth rate, form and overall health of a tree are a function of the natural and man-made phenomenon the tree has experienced in its lifetime. Combinations and variations of all methods can and will occur, depending on the species, age, and location of each tree. Branches or limbs shall be pruned back to the branch collar so that no stub is left. When only a portion of a limb is to be removed, the portion removed shall be pruned back to a limb at least one-third (1/3) the diameter of the portion removed.

1. Vertical Trimming

Vertical trimming consists of the pruning back or removal of side branches in a vertical plane. Vertical trimming is required where trees are growing adjacent to utility lines. This method can leave the tree in a somewhat flat-sided appearance. Shortening branches above and below the indented area, or balancing-the opposite side of the crown, will usually improve the appearance of the tree. This method is used often on species where sprouting from the cut is unlikely.

2. Natural Trimming

Natural trimming describes the method of trimming tree limbs and trunks in such a manner that they will naturally grow away from the lines. This method sometimes removes a larger portion of a tree than other methods but will reduce the potential for problems in the future. This often results in a natural looking tree when finished even if a large amount of wood has been removed. Once a tree has been trimmed in this fashion, the time spent trimming this tree on subsequent cycles can be significantly reduced. This can bring about an ideal situation between the utility and the tree owner. Most shade trees lend themselves easily to this type of trimming. Red Maple, Live Oak, Dogwood, and Hickory adapt well to the natural clearance method,

3. Drop V Method

The Drop V method of tree trimming is very similar to the Natural method. In this method the tree is trimmed back to a lower V or crotch of the trunk. Branches are removed from within the crown to allow lines to pass through. It is used on species which grow tall and relatively fast. Trees trimmed by this method can then be maintained by keeping the inside clean of any sprouts to minimize interruption of service while allowing the outer limbs to continue to grow somewhat screening the effects of the trimming operation. This method is often used on trees which cannot be removed and are growing under the power lines in rights-of-ways.

4. Crown Reduction Trimming

The crown reduction method is, as the name implies, the trimming of the crown of a tree. Crown reduction is often required when a tree is located directly beneath a line. The main leader or leaders are cut back to a suitable lateral. (The lateral should be at least one-third the diameter of the limb being removed). In some cases, more trimming would be advised in order to balance out the appearance of the tree. In certain species, such as pines, crown reduction leads to all undesirable condition. This is due to the distortion of the natural growth habit of these species. The best recommendation in most circumstances, would be removal and replacement with a suitable species. However, crown reduction will be performed when removal is not possible or practical.

B. Emergency Trimming in Response to Tree Related Outage

Emergency maintenance trimming is usually required as the result of a tree or limb falling on the electric lines, due to lightning. high winds, rain, etc. During emergency situations, the terms and provisions of this manual will be temporarily waived so that in no way will they hamper private or public work to restore order and/or service to our community. Every reasonable effort will be made to limit such trimming to only that which is necessary to achieve the desired correction of the hazard and or restore electric power.

C. Stump Removal

Stumps of removed trees will be cut down to ground level. On public rights-of-way, where grass mowing regularly takes place, landscaped areas, or where adjacent property owners request, the stump will be cut six (6") inches below ground level with a stump grinder and the hole refilled to ground level.

D. Notification and/or Permission to Proceed.

The COT Electric or the Contractor will attempt to notify each property owner contiguous to the work to be performed of our intent to trim and or remove trees as required. Further, for all homes and businesses not directly contacted, the COT Electric will leave written notification (door hanger) of our intent to perform the work as required. This notice will include a telephone number for customer inquiries. If there is no inquiry within three (3) working days, the line clearance operation will proceed.

The above terms and provisions will be expressly followed, except during the period of anemergency such as a hurricane, tropical storm, severe thunderstorm, or any act of God, at which time these above terms and provisions will be temporarily waived so that in no way will they hamper private or public work to restore order and/or service to our community.

IV Existing Transmission Linc Maintenance, Trimming and Mowing

Due to the extremely high voltages of transmission lines, and in the interest of public safety and welfare, the Transmission Right of Ways will be maintained clear of all trees. This clearance provides control of hazardous area in terms of fire potential and relative ease of access to crews for construction/maintenance of the lines. These transmission lines serve large geographical areas;

therefore, continual service or immediate restoration of electric service is essential.

Annual mowing of the Transmission Right-of-Ways is beneficial to the Utility, utility customers, and wildlife. Recent studies have shown diversity in habitat is beneficial to wildlife. Mowing produces new succulent growth of forage, which improves the food supply with the adjacent wooded areas still providing shelter.

A. Limits of Maintenance

On Tallahassee Electric Department fee simple easements or Rights-of-Way, COT Electric will perform trimming or mowing to a line drawn vertically at approximately twenty feet (20') to thirty-three (33') from the outside conductor (depend on line voltage). This is subject to any assigned deed or easement restriction and City and State laws. It includes trimming and/or removal of grass, brush, trees, etc.

All trees, underbrush, etc., will be maintained at the ground line. In swamps or inundated areas where it is impractical to cut trees or underbrush at the ground line, it will be cut as close to the surface of the water as practical. Unless otherwise specified, all COT Electric transmission right of-ways will be maintained as outlined above. It must be understood that these guidelines are the optimum possible and are subject to the availability of funds, equipment and personnel.

No notification for right-of-way mowing will be made to adjacent property owners unless otherwise specified by deed or easement restriction or requested by the Tallahassee Electric Department Forester. When trees that are not on the easement or right of way require removal, permission will be obtained from the property owner prior to commencement of the work. Leon County GEM approval will be obtained prior to removal of any protected tree as defined in Leon County Development Code Section 10-4.362 (see Appendix 5).

V. Use of Herbicides and Tree Growth Regulators

A. <u>Herbicides</u>

The herbicides and herbicide mixtures will be approved and directed by the COT Electric Department Utility Forester. COT Electric's contractor representative shall be licensed and be responsible for training employees in proper application methods.

Currently the following herbicides are approved for use on the COT Electric system:

Garlon-4 being used as a cut stump and basal application

Round-Up being used for grass and weed control around electric substations.

Spraykil is used around the base of transmission poles to improve visibility during

inspection

All application instructions as listed on the Label shall be followed especially where it concerns wetlands, lakes, streams, and other water bodies. The COT Utility Forester will cooperate with all public agencies and organizations interested in or affected by the herbicide brush control program. The COT Utility Forester will be available to answer questions and present programs as requested, explaining the use of herbicides on the COT electric system.

B. <u>Tree Growth Regulators</u>

Some large and significant trees will be retained within the right of ways after careful pruning for safety clearances of the wire path these trees may be treated with a Tree Growth Regulator (TGR) in order to reduce the amount of sproutingback into the power line. This

will help to reduce the impact of future trimming on these trees. Young trees having the potential to grow into the overhead lines, that have been planted beneath the lines are also being treated with TGRs in order to reduce their growth potential and extend the time that these trees can remain in place. Currently COT Electric is using the Cambistat, which is a liquid that is mixed with water and then injected into the soil around the base of the tree. The material is taken up into the growing portions of the tree (branch tips) where its effect will be noticeable after approximately eighteen months.

VI. Construction Procedures

A. General

This section pertains to the construction, re-construction, re-location and maintenance of overhead lines and extensions on and along public road rights of way of electric lines 3,000 feet or less, except in Canopy Roads, Special Development Zones, Flood Plains, Conservation or Preservation Areas and Wetlands which require a separate Environmental Management Permit, and the relocation of existing facilities required for development activity where relocation is performed concurrently with permitted development activity.

Tree removal and protection shall be conducted in accordance with this manual. Erosion control devices such as hay bales and silt fences will be applied as specified in Section VII of this manual. Also reference figures 1-7 om the appendix for specifications and examples of applications.

Erosion control devices will be in place prior to beginning construction during inclement weather and/or projects of more than one day in duration. All trenches, excavations and road shoulders shall be backfilled and compacted. Upon completion of work, disturbed areas will be restored in accordance with the specifications outlined in Section VII.C.

B. Tree Protection During Construction

When a tree does not present an immediate hazard or an obstruction to reasonable access to utility easement and/or property, protection will be provided. Protection will be provided for a minimum of 75% of the Critical Protection Zone (CPZ) see figure 1. Protection will be accomplished by staking and flagging or fencing to prevent vehicular or other traffic within the CPZ.

C. Overhead Pole Installation

Poles will be installed as shown in figure 2. A minimum amount of soil will be mounded and tamped around the pole at the ground line to allow for settling. Where new poles are located near and uphill from stormwater drains, sedimentation and erosion controls will be implemented.

D. Underground Line Installations

After installation of underground system equipment such as pedestals, transformers, switchgear, and cables, disturbed areas will be restored in accordance with the specifications outlined in Section VII.C, and if required, consistent with figure 3 in Appendix I. When pavement is disturbed, the excavation shall be backfilled and repaired in accordance with the City's Streets and Drainage Division specifications in force at the time that the work is done.

VII Sedimentation and Erosion Control

A. General

Erosion shall be minimized, and sediment retained on the work site through the application of the appropriate erosion control methods listed below (see figures 2-7). Methods of control shall be suitable for the work site size, vegetative cover, soil type, and the type of work activities involved. Erosion and sediment control will be conducted in accordance with the Florida Development Manual, Department of Environmental Regulation, Erosion and Sediment Control Best Management Practices. Supervisory personnel shall be experienced and/or trained in the proper application of these procedures. Erosion control methods may include, but are not limited to:

- 1 Limiting the amount of clearing necessary.
- 2 Staging clearing activities to minimize the length of time any area is left un-stabilized.
- 3 Straw bale barriers.
- 4 Silt fences
- 5 Storm drain inlet protections.
- 6 Temporary diversion dikes
- 7 Temporary sediment traps.
- 8 Seeding.
- 9 Sodding.
- 10 Erosion control and seeding mats.

B. Cleanup

Cleanup of the job site will be an ongoing process and will be done as quickly as is practical. Upon completion of work, the site will be cleaned of signs of operations.

C. Restoration

Ground cover removed during construction shall be restored as close to its original state as possible. Restoration will include the protection of road shoulders, ditch banks, and other slopes subject to rapid erosion.

Restoration will be accomplished by seeding and mulching, sod replacement or sprigging where appropriate. In areas where seeding and mulching will not prevent erosion, sprigging or sodding will be used. Sod will be used in developed areas where an established stand of grass exists prior to construction. The following is a description of restoration methods.

1. Sod Replacement

In developed area the sod should be restored as close to its original slate as possible.

2. Sprigging

Live Sprigs with uninjured roots shall be planted in rows. Distance between rows and between plants in rows shall not exceed one foot

3. Seeding

During the summer months grass seed shall be a mixture 50 parts Pensacola bahia seed and 50 parts millet seed applied at 20 lbs. Per acre each. During the winter months, the grass seed mixture shall be 50 parts winter rye and 50 parts Pensacola Bahia seed applied at 20 lbs. Per acre each. Seeded areas shall be uniformly mulched with hay so that the thickness is adequate to hold soil, but sufficiently loose to allow sunlight penetration.