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**Paul H. Harrington**  
Associate General Counsel

March 17, 2005

Dr. Christine D. Brooks  
Commission Secretary  
Public Service Commission  
Of the District of Columbia  
1333 H Street, N.W.  
2<sup>nd</sup> Floor, West Tower  
Washington, DC 20005

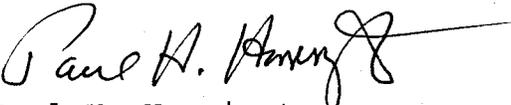
05 MAR 17 PM 4:19  
CHIEF CLERK  
PUBLIC SERVICE COMMISSION

**Re: Formal Case No. 982**

Dear Ms. Brooks:

Enclosed for filing on behalf of the Tree Trimming Working Group, pursuant to Order No. 13503, issued February 9, 2005, are the original and fifteen (15) copies of the Potomac Electric Power Company's Vegetation Management Plan For Utility Tree Trimming in the District of Columbia.

Very truly yours,

  
Paul H. Harrington

PHH/aka

cc: All Parties in Formal Case No. 982

**VEGETATION MANAGEMENT  
PLAN FOR UTILITY TREE PRUNING**

**DISTRICT OF COLUMBIA**



**March 16, 2005**

## Utility Vegetation Management

Vegetation management programs comprise a significant portion of effort among the many maintenance functions performed by Pepco to ensure the safe and reliable operation of the electric system within the District of Columbia. It is estimated that there are in excess of 65,000 street trees along the 900 miles of Pepco owned distribution lines that supply electric power to the citizens of the District. Annually, Pepco spends an average of \$1.25 million to maintain the required clearance between trees and electric facilities. There are three main reasons why these expenditures are just and necessary.

1. Electric Service Reliability

It is generally accepted that the majority of electric distribution power outages occur when trees, or portions of trees, grow or fall into overhead electric power lines. While many of these outages cannot be prevented (due to storm, heavy winds, etc.), a good portion can be mitigated by managing the vegetation before it becomes a problem. Due to the established management program that has been in place for many years, only around 20% of non-storm outages within the District are caused by trees. However, during storm situations, tree related outages can account for 2 to 4 times this amount, depending upon the severity of storm.

2. Public Safety

When trees interfere with power lines, there is always the threat of unsafe electrical exposure to the public. For example, a fallen power line caused by a limb failure, can be a hazard to the public until a Pepco crew can de-energize it and make repairs.

3. Fires

Arcing, an electrical path between any part of a tree and a high voltage conductor, has the potential to occur if the physical separation between these elements is reduced. While the incidence of fires caused by tree and power line conflicts is relatively rare, the potential still exists.

Operating a comprehensive vegetation management program will mitigate these potential problems and is in Pepco's and the District of Columbia's best interest. This plan applies to trees publicly-owned and maintained by the District of Columbia.

## Vegetation Management Plan:

Pepco has a five-part vegetation management plan that is designed to: (1) maintain a high degree of reliability across the entire electric distribution system; (2) target areas of the electric system found to be most susceptible to damage from trees during storms; (3) assist the District Department of Transportation's (DDOT) Urban Forestry Administration (UFA) in the removal of trees in close proximity to Pepco's electric lines; (4) assist District residents in the removal of trees in close proximity to Pepco's electric lines; and (5) perform emergency tree and limb removal from electric lines. The activities performed in each program are as follows:

### 1. Routine Scheduled Pruning

- Pepco annually prunes approximately 450 miles of distribution lines to remove two years of growth. Scheduled pruning is performed on a two-year cycle and is performed per ANSI A300 (Part 1) - 2001: *Tree, Shrub and Other Woody Plant Maintenance – Standard Practices (Pruning)* and its companion best management practices publication; *Utility Pruning of Trees*. ANSI A300 (Part 1) is the standard for performing tree pruning.
- Routine scheduled pruning is designed so that on the next prune cycle, no trees previously pruned will have limbs near or in contact with the electric facilities.
- Routine scheduled pruning removes the amount of growth that is typical for a two-year period, in accordance with the health, location and species of tree. The attached chart is intended to serve as a guideline. (See Attachment 1)
- Routine scheduled pruning will be done in a manner that allows qualified employees to maintain minimum approach distances mandated by OSHA during subsequent tree maintenance.
- Routine scheduled pruning is primarily focused at limbs below and along side of the electric lines. Removal of limbs above the line varies, depending on tree species, branch attachment, health of branch and proximity of electrical facilities. Generally, pruning is minimal and only performed to maintain clearance for proper operation of the electric facilities. Dead branches (up to 6" in diameter) in close proximity above that pose a threat to the electric lines are removed. Dead wood below and along side the lines are cut only to remove branches within the two-year growth pruning envelope.

- Work schedules are provided to the UFA, (See Attachment 2). Submission of the list of tree locations to be pruned by Pepco with an accompanying map is due to UFA by the 15<sup>th</sup> of the previous month prior to work starting. Written objections, if any, will be provided to Pepco by UFA within two weeks. All non-objectionable work can proceed in accordance with the blanket permit.
- All tree branches and material removed by Pepco through routine scheduled pruning will be disposed of by Pepco.
- Conditions potentially damaging to electric lines noted during routine scheduled pruning, but for which remediation is outside the scope of routine work, shall be communicated in writing to the UFA.

2. Storm Hardening Tree Pruning or Removal of Trees

- Storm hardening refers to additional tree pruning, beyond that performed during routine scheduled pruning, on circuits that have been identified to be particularly susceptible to damage during storms. This is done only in areas where work is being performed to improve reliability to a level near the performance of the rest of the system.
- All work must be approved by the UFA prior to any work starting, in keeping with permit provisions.
- Tree pruning is focused at removal of overhanging limbs that could fall onto the wires and cause outages. In addition, added clearance is provided along side of the wires so that the circuit can withstand higher winds without contact between the tree and lines.
- No PEPCO feeder hardening will proceed until the following agreed to process for targeted vegetation management procedures have been followed and approved by UFA:
  - PEPCO will identify targeted areas and have its Forester provide an evaluation to UFA specifying the location and action required to manage vegetation.
  - UFA will respond to PEPCO either agreeing or expressing conditions necessary to achieve the action sought by PEPCO.
  - UFA will notify the appropriate ANC and adjoining resident of the proposed action and request time on the ANC agenda for a joint presentation by UFA and PEPCO.

- Following the joint presentation, if no questions are raised, UFA will authorize PEPCO to proceed with the work; however, if the community objects, UFA and PEPCO will treat community objections as an appeal.
  - UFA and PEPCO will review community recommendations and give "great weight" to the ANC's comments. Great weight requires acknowledgement of the ANC as the source of the recommendations and explicit reference to the ANC's issues and concerns during deliberations; PEPCO and UFA will revisit and reevaluate the site location to determine if the community concerns can be addressed. UFA may use technology during the course of its reevaluation, but PEPCO will continue to follow standard protocols.
  - New technology will be used in the case of difficult diagnosis, non-standard or non-routine determinations, differing conditions (power line and non-power line locations), base and height parameters, etc.
  - After giving great weight consideration to the community's (ANC's) recommendations, UFA will authorize PEPCO to proceed or state conditions necessary to achieve the approval sought by PEPCO.
- Where possible, all dead limbs that pose a threat to wires, or that are within 10-ft. of the lines, will be removed from the trees.
  - Diseased, dead or dying trees through or along side of wires that pose a threat to these wires shall be removed.
  - The tree to be pruned or removed and adjacent trees shall be posted with a no parking sign 72 hours prior to pruning or removal, indicating tree removal on the tree to be removed, tree pruning on trees to be pruned, and tree work on adjacent trees where work is to be performed.
  - All tree branches and material removed by Pepco will be disposed of by Pepco.
3. Topping Trees for Removal by UFA
- Trees directly beneath or in close proximity to the wires that are dead, diseased or hazardous and identified by the UFA for removal must be topped so that a certified arborist or ANSI A300 trained professional can safely remove the tree without violating OSHA approach standards. Typically, at least 10 feet of working clearance from

energized Pepco wires to the tree is provided. This is to ensure safety of the UFA tree removal crew members.

- All applicable work is performed by Pepco at Pepco's expense.
- No tree will be topped on Fridays to ensure that no tree debris is left over the weekends.
- All tree branches and material removed by Pepco will be placed on the public space (between the curb and the sidewalk) and disposed of by UFA.
- At the time UFA identifies street trees for removal, notification is provided by the UFA to the adjoining resident that the tree is slated for removal. Removal can occur up to 6 months after this notification is provided. Adjacent neighbors are provided a follow-up notice with more details closer to the time of removal. Impacted ANCs are notified at this same time by the UFA. The tree to be removed and adjacent trees are posted with a no parking sign 72 hours prior to removal, indicating tree removal on the tree to be removed and tree work on adjacent trees where work is to be performed.
- UFA will provide Pepco with a list of trees to be topped for removal. Pepco will develop a schedule for topping the trees and provide UFA with a copy of the schedule. Pepco will endeavor to complete topping within 45 days.
- Alternatively, Pepco may, at its discretion in non-emergency situations, de-energize the lines prior to tree removal work by DDOT and therefore negate the need for Pepco to top a particular tree prior to its removal. Pepco will closely coordinate with UFA the scheduling of any line de-energizing to ensure personnel safety and minimize impact on customers.

#### 4. Private Tree Removal

- Privately owned trees identified for removal by homeowners that are in the vicinity of wires will be topped so that a competent professional can safely remove the tree without violating OSHA approach standards. Typically, at least 10 feet of working clearance from energized Pepco wires to the tree is provided. This is to ensure safety of the tree removal crew members. Alternatively, provisions may be made to de-energize the wires until the tree is removed.
- It is the responsibility of the property-owner to secure applicable permit(s) prior to the work being scheduled by Pepco.

- All applicable work is performed by Pepco at Pepco's expense.
  - All tree branches and material cut by Pepco will be placed on private property and disposed of by the party requesting the work to be performed, or the private property owner.
5. Emergency Maintenance Pruning
- During storm events, trees and limbs fall or become entangled within the wires. Pepco responds to these situations to remove the trees or limbs and restore the electric system to normal operating conditions.
  - Trees that are cut from public space will be left on public space for removal by UFA. Trees that are cut from private space will be left on private space for removal by the private property owner.

Oversight & Quality Control:

1. Permit Provisions – All pruning and feeder hardening work shall be performed in accordance with all applicable regulations and permitting provisions.
  - Routine Scheduled Pruning – A permit will be issued by DDOT to allow Pepco to perform routine scheduled pruning. This permit will conform with all Public Space regulations.
  - Feeder Hardening - An individual permit will be needed for each feeder hardening area.
  - Emergency Maintenance Pruning – Notification will be provided to DDOT when an emergency occurs and emergency work is performed.
2. Oversight - General – With the oversight of the UFA, Pepco conducts tree pruning activities along the public thoroughfares in the District of Columbia.
  - UFA representatives must approve tree pruning practices and grant permission before any tree in public space is pruned or removed, and inspect the work once completed. Schedules for routine scheduled pruning work are provided to UFA on a monthly basis (by the 15<sup>th</sup> of the previous month) to permit inspection prior to the work being performed. With regard to storm hardening work, UFA and Pepco shall inspect all locations before any work is performed and all work to be performed must be approved by UFA. With regard to tree topping assignments, locations are determined by UFA and jointly scheduled by Pepco and UFA so that Pepco can perform the work.

- UFA reserves the right to stop Pepco and or its authorized agents or representatives from carrying out work on trees in public space if Pepco's practices do not conform to ANSI A300 standards or if there are questions or issues concerning safety.
  - Those contracted by Pepco to work on trees in public space must employ qualified line-clearing arborists (ANSI A300 4.35 and 5.9.1.2), or International Society of Arboriculture certified arborists. All individuals must be trained in ANSI A300 standards.
  - No trimming will be allowed on trees in public space. Trees must be pruned to ANSI A300 standards.
  - Joint Pepco and UFA reviews are held monthly to discuss tree pruning issues and concerns, community issues and concerns, and to review the quality of work being performed.
  - The Chief Forester of the District of Columbia has final decision-making authority regarding any issue pertaining to a tree in public space.
3. Oversight - Routine Scheduled Pruning - Before any routine scheduled pruning is performed, a permit must be obtained from UFA. Routine scheduled pruning shall be monitored during and/or after the work is performed by qualified Pepco and UFA staff members.
  4. Oversight - Storm Hardening Pruning or Removal of Tree - See Attachment 2
  5. Oversight - Topping for Removal (TFR) by UFA - At the request of UFA, Pepco will top trees in public space. Once Pepco completes this task, UFA will then completely remove the trees.
    - UFA will provide Pepco with a list of trees to be topped for removal. Pepco will develop a schedule for topping the trees and provide UFA with a copy of the schedule.
    - Upon completion of the topping, cut debris will be left in a manner as to avoid blocking sidewalks or roadways. Pepco will notify UFA when topping is completed and UFA will arrange for tree debris removal along with the removal of the remaining tree.
    - In the event of Pepco performing TFR service on a very large tree, Pepco may request UFA to coordinate "work along" assistance to facilitate cleanup and removal of tree debris.

6. Oversight - Topping for Removal of Trees on Private Property

- UFA will provide no oversight of trees on private property except in cases when the tree to be topped or removed is a Special Tree as defined in the Urban Forest Preservation Act of 2002. Although Pepco does not require a permit to prune a special tree that Pepco has identified, if Pepco receives a request to top or remove a Special Tree on private property, Pepco must request to see a copy of the Special Tree permit from the property owner and record the permit number on their daily work record.
- No permit is required by Pepco to prune a Special Tree. However, if a Special Tree is pruned by Pepco so as to result in the death of the tree (e.g., excessive and aggressive pruning, topping), penalties will be initiated.
- In all cases of trees cut on private property, limbs, branches, trunks and other debris will be left on said private property. Debris shall be disposed of by the property owner.

Communication & Resident Education Plan:

A plan identifying how Pepco communicates to residents of the District of Columbia why trees must be pruned and how trees are pruned, as well as how information regarding pruning schedules is communicated is contained in a companion to this procedure.

Attachment 1

Species (Common Name)	Ave. Ann. Normal Growth (Ft.)	Ave. Ann. Sucker Growth (Ft.)	Approx. Mature Height (Ft.)	Remarks
Ailanthus (Tree of Heaven)	1½-2½	5-10	40-50	Invasive Exotic Species, Incompatible with Overhead Electric, Should be removed
Ash	2-3	4-5	65-80	Incompatible with Overhead Electric, Should be removed when topping is required
Apple (Varieties)	1	2	20-25	
Basswood (Linden)	1½-2	3-4	60-75	Incompatible with Overhead Electric. Should be removed when topping is required
Beech	1-2	2-3	55-60	Incompatible with Overhead Electric, Should be removed when topping is required
Birch	2-2¼	3-4	45-50	Weak structurally. Intolerant of heavy pruning. Form is spoiled by heavy pruning.
Box Elder	2-3	5-6	45-50	Incompatible with Overhead Electric, Should be removed when topping is required
Catalpa	1-1½	3-4	45-60	Incompatible with Overhead Electric, Should be removed when topping is required
Cedar (Eastern Red)	1-2	1-2	40-50	
Hawthorn (Varieties)	1-1½	2	20-30	
Hickory (Varieties)	1-2	3-4	20-30	Incompatible with Overhead Electric, Should be removed when topping is required
Locust (Black)	2-3	6-7	50-60	Incompatible with Overhead Electric, Should be removed when topping is required
Locust (Honey)	1½-2	3-4	65-80	
Magnolia	1½-2	3-4	60-90	
Maple (Norway)	1-2	3	45-50	Incompatible with Overhead Electric, Should be removed when topping is required
Maple (Red)	1½-2	4-5	45-50	Incompatible with Overhead Electric, Should be removed when topping is required
Maple (Silver)	3-4	7-8	70-75	Incompatible with Overhead Electric, Should be removed when topping is required
Maple (Sugar)	1-1½	2-3	65-75	Incompatible with Overhead Electric, Should be removed when topping is required

Species (Common Name)	Ave. Ann. Normal Growth (Ft.)	Ave. Ann. Sucker Growth (Ft.)	Approx. Mature Height (Ft.)	Remarks
Oak (Pin)	2-2½	3-4	60-75	Incompatible with Overhead Electric, Should be removed when topping is
Oak (Red)	2-3	3-4	75-85	Incompatible with Overhead Electric, Should be removed when topping is required
Oak (White)	1-2	3-4	65-75	Incompatible with Overhead Electric, Should be removed when topping is required
Oak (Willow)	1½-2	3-4	70-80	Incompatible with Overhead Electric, Should be removed when topping is required
Osage Orange	1-1½	2-3	40-45	
Pear	1-2	3	35-40	
Persimmon	1-2	3	25-30	
Pine (Virginia)	2-3	2½-3½	30-40	
Poplar (Lombardy)	4-5	8-9	50-60	Incompatible with Overhead Electric, Should be removed when topping is required
Poplar (White)	1½-2	3-4	45-50	Incompatible with Overhead Electric, Should be removed when topping is required
Sassafras	1½-2½	3-4	30-50	Incompatible with Overhead Electric, Should be removed when topping is required
Sycamore (American)	2-3	5-8	80-90	Incompatible with Overhead Electric, Should be removed when topping is required
Tulip Tree (Yellow Poplar)	2½-3	6-7	80-100	Incompatible with Overhead Electric, Should be removed when topping is required
Walnut (Black)	1-1½	2-3	65-80	Incompatible with Overhead Electric, Should be removed when topping is required
Willow (Black)	3-4	5-6	45-55	Incompatible with Overhead Electric, Should be removed when topping is required
Willow (Weeping)	3½-4½	7-8	45-50	Incompatible with Overhead Electric, Should be removed when topping is required

## Attachment 2

### **District Department of Transportation Urban Forestry Administration**

#### **Removal and Pruning Policy November 3, 2004 Directive**

As of this date, the following policy directive is in effect with regard to street tree pruning, trimming, and removals within the District of Columbia. This policy applies to both the Urban Forestry Administration (UFA) and PEPCO.

- UFA routine pruning and PEPCO routine (2 years of growth) tree trimming will continue as scheduled.
- PEPCO will provide a monthly schedule (by the 15<sup>th</sup> of the previous month) of planned routine pruning and trimming. This does not include PEPCO line hardening, which is described below.
- All removal of street trees will proceed as scheduled, including PEPCO topping-off at UFA request.
- No PEPCO feeder hardening will proceed until the following agreed to process for targeted vegetation management procedures have been followed and approved by UFA:
  1. PEPCO will identify targeted areas and have its Forester provide an evaluation to UFA specifying the location and action required to manage vegetation.
  2. UFA will respond to PEPCO either agreeing or expressing conditions necessary to achieve the action sought by PEPCO.
  3. DDOT will notify the appropriate ANC of the proposed action and request time on their agenda for a joint presentation by DDOT and PEPCO.
  4. Following the joint presentation, if no questions are raised, DDOT will authorize PEPCO to proceed with the work; however, if the community objects, DDOT and PEPCO will treat community objections as an appeal.
  5. DDOT and PEPCO will review community recommendations and give "great weight" to the ANC's comments; PEPCO and DDOT will revisit and reevaluate the site location to determine if the community concerns can be addressed. UFA may use technology during the course of its reevaluation, but PEPCO will continue to follow standard protocols.
  6. After giving "great weight" consideration to the community's (ANC's) recommendations, UFA will authorize PEPCO to proceed or state conditions necessary to achieve the approval sought by PEPCO.

**COMMUNICATION & RESIDENT EDUCATION PLAN**  
**A COMPANION TO THE VEGETATION MANAGEMENT**  
**PLAN FOR UTILITY TREE PRUNING**

**DISTRICT OF COLUMBIA**



**March 16, 2005**

## Communication & Resident Education Plan

### A Companion to the Vegetation Management Plan for Utility Tree Pruning in the District of Columbia

#### Introduction

This plan supplements Pepco's "Vegetation Management Plan for Utility Tree Pruning in the District of Columbia" dated March 16, 2005. The Communication & Resident Education Plan provides information on the ways Pepco will educate residents of the District of Columbia on reasons for pruning or removing trees, and how such work is performed. The plan will also identify how Pepco will communicate routine tree pruning schedules, as well as provide information on storm hardening and tree removal activities.

#### Education

Information regarding the need for pruning tree limbs or removing trees growing near overhead electric lines and the way such pruning or removing is accomplished is conveyed to residents of the District of Columbia in a number of ways. These include:

- Informational video: A 20-minute informational video is targeted to air on cable access channels DC 16 and DC 28. The video will also be featured in an infomercial to be aired on NBC 4. Copies of the video will be sent to each ANC and will be available at no cost to customers who may order a copy through Pepco's website, [www.pepco.com](http://www.pepco.com). Finally, community groups or organizations may request a viewing of the video and discuss the content with a member of Pepco's Speaker's Bureau. To arrange for a Speaker's Bureau representative, Pepco may be contacted at: **(202) 872-2089**.
- Informational brochure: An informational brochure entitled "Trees and Reliable Electric Service" is available to customers in both English and Spanish. This brochure discusses the importance of tree pruning around power lines to ensure reliable electric service, and provides suggestions for planting the right kinds of trees. The eight panel brochure addresses: how line clearance is done, tree topping, alternatives to pruning, and how to prevent future tree-wire problems. The brochure may be ordered through Pepco's website, [www.pepco.com](http://www.pepco.com). Copies of the brochure are also regularly distributed at various community group or organizational meetings. Alternatively, Pepco may be called at **202-833-7500** to request a copy by mail.
- Bill inserts: The February 2005 issue of "Lines," an informational insert included in the bills sent to customers, features information on tree pruning and provides information on how to order additional information. The April 2005 issue of "Lines" features information on 'right tree – right place.' This information will be repeated on a periodic basis in the future.

- **Media:** Ads appearing on local television, radio and in local newspapers provide information to residents on where and how to get additional information regarding Pepco's tree management practices.

### **Communication**

Pepco advises residents of on-going and planned tree pruning / storm hardening in District of Columbia neighborhoods in a number of ways as well, including:

- **Pepco website:** Routine tree pruning schedules will be posted on Pepco's website, [www.pepco.com](http://www.pepco.com), on a monthly basis.
- **Phone:** Routine tree pruning schedules may be obtained by calling xxx-xxx-xxxx. The schedules will be updated on a monthly basis.
- **Signs:** Signs are posted in work areas 72 hours prior to the work to advise residents of parking restrictions required to perform tree work. For routine scheduled pruning or storm hardening pruning in sparse tree growth areas, each tree will be posted with a tree work sign. For routine scheduled pruning or storm hardening pruning in dense tree growth areas, tree work signs will be posted at each end of the block where work is to be performed and at approximately 75-ft. intervals in between. For tree removal, the tree to be removed will be posted with a tree removal sign, and adjacent trees posted with tree work signs.
- **Door hangers:** Door hanger packages containing information on what work is to be done, why such work is necessary, how the work will be performed and contact information will be distributed to the main entrance of buildings in the immediate vicinity of storm hardening work 72 hours prior to work being performed. Such packages will also be distributed to the main entrance of buildings for the purpose of soliciting permission to perform routine scheduled pruning of trees on private property. Door hangers are not distributed for routine scheduled pruning of trees in the public space.