STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 12-01-10  PURA INVESTIGATION INTO THE TREE TRIMMING PRACTICES OF CONNECTICUT’S UTILITY COMPANIES

June 25, 2014

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DECISION
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DECISION

I. INTRODUCTION

A. SUMMARY

Pursuant to Governor Dannel P. Malloy's directive, Public Act 13-298, An Act Concerning Implementation of Connecticut’s Comprehensive Energy Strategy and Various Revisions to the Energy Statutes, and the General Statutes of Connecticut §16-11, the Public Utilities Regulatory Authority extensively reviewed the tree trimming and vegetation removal practices and requirements for public utility companies in Connecticut. Three successive major storms demonstrated the importance of tree management along the state’s heavily forested roadways and other rights-of-way. Many recommendations and requirements were reviewed and directed in prior proceedings by the State of Connecticut to make the utility infrastructure within Connecticut more resilient to storm damage, and to promote shorter restoration time following outages from similar weather related events. Most of the recommendations have been commenced by the utilities. The electric distribution companies have approved vegetation management plans with significantly increased budgets over the forthcoming five to eight years. This docket reviews and clarifies the practices, procedures and requirements for public utility company vegetation management to comply with the Governor’s directives and legislative mandates such as Public Act 14-151, An Act Concerning Tree Trimming. The Authority has attempted in this Decision to appropriately balance the state’s interests in maintaining a resilient energy infrastructure while simultaneously preserving and protecting the environmental, aesthetic, and economic value of the state's natural vegetation. No tree will be pruned or removed without the issuance of a permit from the local tree warden.

B. BACKGROUND OF THE PROCEEDING

On January 11, 2012, Governor Dannel P. Malloy announced a number of storm disaster preparedness and recovery initiatives. One of these initiatives was that the Public Utilities Regulatory Authority (Authority or PURA) address the Connecticut utility companies’ tree trimming plans to prevent excessive infrastructure damage. This docket was created to accomplish that initiative.

C. CONDUCT OF THE PROCEEDING

By Revised Notice of Hearing dated July 24, 2012, the Authority conducted public comment hearings at: the Farmington Town Hall, One Monteith Drive, Farmington, CT on June 31, 2012; the Manchester Town Hall, 494 Main Street, Manchester, CT on August 1, 2012; the Norwich City Hall, 100 Broadway Street, Norwich, CT on August 9, 2012; and the Trumbull Town Hall, Council Chambers, 5866 Main Street, Trumbull, CT on August 7, 2012. By Notice of Rescheduled Hearing dated July 30, 2012, the Authority rescheduled the Trumbull hearing from August 7 to August 16, 2012.
By Notice of Request for Written Comments dated July 19, 2012, the Authority requested all utility companies and invited interested persons to submit written comments on issues related to tree trimming practices of Connecticut’s utility companies.

By Notice of Hearing dated June 18, 2013, the Authority scheduled a hearing for June 27, 2013, at the offices of the Authority, Ten Franklin Square, New Britain CT 06051. By Notice of Rescheduled Hearing dated June 24, 2013, the Authority rescheduled the June 27, 2013 Hearing to July 31, 2013. By Notice of Close of Hearing dated September 24, 2013, the hearing in this matter was closed.

A Draft Decision was issued on November 19, 2013. All participants were given the opportunity to file written exceptions to and present oral arguments concerning the Draft Decision.

By Decision dated January 29, 2014, the Authority reopened the record in this docket for the limited purpose of addressing a motion from The United Illuminating Company (UI) for a technical session and accepting additional public comment.

By Notice of Technical Meeting and Public Information Session dated February 11, 2014, the Authority held a Technical Meeting in its offices on March 5, 2014, and on March 6, 2014, at the Hamden Middle School Auditorium in Hamden, CT.

By Notice of Technical Meeting dated March 11, 2014, a technical meeting was held in the Authority’s offices on March 27, 2014. The purpose of that technical meeting was to further review the electric distribution companies’ (EDCs) Vegetation Management Plans and the effect due to tree removals. The meeting was also convened to review the EDCs’ explanation and coordination of tree trimming projects with local officials prior to any trimming projects, and how such actions can be improved.

By Notice of Inspection dated April 1, 2014, an inspection of the tree trimming practices in UI’s service territory was conducted on April 3, 2014. Additionally, by Notice of Inspection dated April 7, 2014, an inspection of the tree trimming practices in the service territory of The Connecticut Light and Power Company (CL&P) was conducted on April 11, 2014.

D. PARTICIPANTS

A listing of all participants is appended hereto as Appendix A.

E. PUBLIC COMMENT

The Authority held four hearings on July 31, and August 1, 9 and 16, 2012, across the state to receive public comment. One person spoke at the Manchester hearing and three people spoke at the Trumbull hearing. There was no public comment given at the Farmington and Norwich hearings. The Authority also held a hearing at its offices in New Britain and received comments from two members of the public.
At the Manchester Hearing, the speaker was concerned with the level of trimming on a tree, which led to the tree dying a number of years later. He was also dissatisfied with the unresponsiveness of the electric company and its contracted tree crew. Tr. 8/1/12, pp. 9-18.

At the Trumbull Hearing, one speaker commented that the electric grid in Connecticut is challenged with numerous utility poles of poor condition and that the trees and branches pose a great risk to those poles. He asserted that a reliable grid is important and that the electric company should do the right thing, despite the arguments over the aesthetics of a tree or branch. Tr. 8/16/12, pp. 37-40. Another speaker noted that tree care is a subset of energy costs and that most power outages in Connecticut are caused by trees and branches. He complained that he is paying the highest price for energy in the market at $0.24 a kilowatt hour that cost $0.04 to make. Id., pp. 51-55. Lastly, the Town of Trumbull Tree Warden commented that based on a survey, there was a good response from electric companies and a poor response from the telephone company. There are no cable television companies today removing low branches around cable wires. He stated the town has no control over private-property trees nor does the state. He indicated that the electric utilities, tree wardens and others need to assess the conditions of trees and remove hazardous trees. He supported the right-tree-right-place guidelines. Id., pp. 60-69.

During the July 31, 2013 Hearing, Mary-Michelle Hirschoff of the Garden Club of New Haven indicated that there should be a mechanism to ensure that work crews do not prune a tree differently or remove it once an agreement is made. She indicated that removal of hazardous trees and branches should be addressed first. Ms. Hirschoff noted that there is no hard data that analyzed whether trees that failed in the 2011 storms were also trees that had been previously pruned. Ms. Hirschoff stated that the rigid application of the clearances in enhanced tree trimming (ETT) has an irreversible impact where trimming much of a tree would create a hazardous tree. Ms. Hirschoff indicated that it is important for there to be a general notice to the public to look for notices in the mail. Tr. 07/31/13, pp. 81-89; 95 and 96.

Eric Hammerling of the Connecticut Forest and Park Association stated that there should be greater investment in managing the healthy trees of the roadside forest. Underinvestment in the past means that much more funding is needed to address problem trees. Mr. Hammerling noted that there was not enough time or data available to fully evaluate or make a consensus recommendation on the potential effectiveness of ETT. According to Mr. Hammerling, better management of a healthy roadside forest will ultimately provide for community aesthetics, for wildlife benefits, for money saved for consumers, for better protected public health, for emergency services, for the need to access open roads and more reliable energy. Id., pp. 157, 160-163.

The Authority also held three public comment sessions on March 5, 6 and 11, 2014, to receive public comments. During the March 5, 2014 Public Comment Session, eight members of the public spoke against the EDCs’ proposed ETT programs. In their comments the speakers encouraged the Authority to find a vegetation management program that balanced the needs of the electric companies, homeowners, and environmental groups. Several speakers expressed their concern with the electric companies’ disregard of the property owner rights as well as the lack of any tree replacement protocols as part of the ETT.
At the March 6, 2014 Public Comment Session, 53 members of the public spoke. New Haven Mayor Toni Harp urged the Authority to seek additional refinements to the plan, especially in the areas of implementing a tree replacement strategy for trees removed, additional input from municipal tree wardens, and a tighter definition of a hazardous tree. The City of New Haven’s tree warden, who described the city’s tree replacement policies, believed that the ETT should ensure that every healthy tree is saved. Senate Majority Leader Martin Looney (11th) also spoke regarding the ETT. Senator Looney was concerned about the aggressiveness of the plan and did not believe that it was an appropriate plan to implement. Senator Looney was also concerned that the ETT would allow the electric companies to supersede property owners’ rights. Finally, Senator Looney stated that for any ETT that is implemented, only experienced contractors and arborists should be performing the work.

House Speaker Brendon Sharkey (88th) also noted his concerns with the ETT. The Representative noted that there is a legislative effort under way (HB 5408-AAC Tree Trimming) that is expected to ensure homeowners’ and municipal leaders’ rights in regard to tree trimming. State Senator Joseph Crisco, Jr. (17th) urged the Authority to find a balanced approach that would meet the needs of the utility companies, the homeowners and municipalities. Senator Crisco also suggested a “call before you cut” program be implemented to ensure that property owners were aware of any work to be done on their trees. State Representative Michael D’Agostino (91st) noted that he and his constituents recognize the need to remove/trim dead or hazardous trees that could impact the electric distribution system. However, a “one-size-fits-all” plan as put forward in the ETT is not a preferable method. Representative D’Agostino stated that each neighborhood has its own individuality, and control over the trees that are trimmed or removed should rest with those homeowners and municipalities. Derrylyn Gorski, First Selectman of the Town of Bethany argued that the utility companies should be spending more to upgrade and strengthen its infrastructure as opposed to implementing an ETT.

Many consumers and organizations also provided testimony on the ETT and did not support the UI and CL&P tree trimming plans. Comments from members of the public and other organizations in attendance mirrored those previously provided by the public officials. In addition, a very significant number of the speakers called for in the initiation of a program to begin undergrounding utility lines as opposed to implementing an ETT. Many of the speakers stated that burying utility lines would be much more preferable to the damage that they perceived an ETT would cause to their homes and neighborhoods. They also noted the economic benefits provided by street trees. Besides the impact on property values, there were other socio-economic factors and environmental factors that the speakers thought the utility companies were ignoring with the ETTs’ implementation. Many persons commenting were also supportive of a program that ensured that healthy trees were saved and that some form of tree-replacement protocol be implemented should dead or hazardous trees be removed. The Garden Club of New Haven noted that it does not endorse service outages, but endorses the continued preservation of healthy, valuable trees.
F. THE FORESTRY DIVISION OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION’S POSITION

Christopher Martin, from the Department of Energy and Environmental Protection’s (DEEP) Bureau of Natural Resources, Forestry Division (DFU), spoke at the March 5, 2014 afternoon session. He stated that it is important to appropriately balance the state’s interests in maintaining a resilient energy infrastructure while simultaneously preserving and protecting the environmental, aesthetic, and economic value of the state’s natural vegetation. Connecticut has one of the most dense tree canopies in the United States and is number one in woodland urban interface tree density. Mr. Martin also stated that Connecticut-specific industry standards for tree trimming do not exist. Findings of the State Vegetation Management Task Force (SVMTF) included tree pruning and removal of roadside trees, and the emphasized need for flexibility due to differences among the roadside landscape in Connecticut’s urban, suburban, and rural gradients. Mr. Martin also noted the benefits of trees when they are healthy and well maintained. He sees this area as one of management to protect the utility infrastructure, an area where resiliency and practices of arboriculture and silviculture can take place so that the trees and wires can coexist.

Mr. Martin also discussed the October 2011 Snowstorm, which was more extreme than Irene. Two out of five trees that catastrophically failed and impacted utility wires came from private property. According to Mr. Martin, in the absence of increased tree care of forest management, together with an overall decline in forest health, increased tree failure must be anticipated. Mr. Martin recommended that a multifaceted approach continue to increase Connecticut’s electric power grid resiliency. Smart-grid technology, micro-grid deployment and hardening of the utility infrastructure combined with judicious tree trimming should help ensure a balanced approach. Public benefits from roadside trees vary along landscape gradients from urban, suburban to rural, and those benefits increase proportionately to the density of the population. Mr. Martin also suggested that utility tree trimming should complement smart-growth principles that encourage the public’s interest in downtown residencies. Also, communication and coordination with the municipal tree wardens is essential for a successful tree-trimming program. In the opinion of Mr. Martin, while large structurally sound and healthy trees near utility wires may be acceptable, no amount of pruning in Connecticut can completely avoid outages from occurring during extreme weather events.

DFU noted Governor Malloy’s Two-Storm Panel Recommendation Number 24, which advised the DEEP to convene appropriate state agencies, municipalities, utilities for the purpose of creating a five-year collaborative effort for an enhanced tree-trimming maintenance program, and the development of an educational effort regarding the use of appropriate and diverse tree species in both public and private spaces. DFU suggested that this be done by convening a multidisciplinary team to develop best management tree-trimming practices that recognize public benefits along the roadside tree gradient from urban, suburban to rural landscapes. DFU recommended that the Authority consider creating a standing advisory board comprised of roadside tree and forest management experts. This advisory board could then develop utility tree-trimming recording and performance criteria so the effectiveness of various tree-trimming best management practices can be measured and that those practices be refined as necessary. He also requested that the work of the UCONN extension and
the Connecticut Agricultural Experiment Station on Stormwise and their conclusions and findings be used to advise further roadside tree and forest management decisions and recommendations. According to Mr. Martin, there is some preliminary indication that Stormwise, when implemented, could reduce tree-trimming frequencies from 5 to 15-year cycles. This would be in more rural areas of the state where the Stormwise principles are most effective; however, they could translate into suburban areas and maybe some urban areas. Tr. 03/05/14, pp. 383-394. Tracy Babbidge, DEEP Energy and Technology Policy Bureau, Bureau Chief, also spoke at the March 6, 2014 session in Hamden and reiterated many of the points made by Mr. Martin.

Chris Donnelly, an Urban Forestry Coordinator for the DEEP, spoke at the March 27, 2014 Technical Meeting and claimed that tree risk assessment is very active in tree-care circles. Mr. Donnelly stated that the increase in knowledge and information has grown exponentially due to the amount of detailed data derived from inventory technology and remote sensing technology, to develop a better understanding of the environment where these trees grow, which is a major reason why certain trees fail and others do not. Also, there are many new tools that measure tree decay. These tools are moving out to the field. There should be skilled, knowledgeable professional people in the field making such decisions and assessing trees. Tr. 03/27/14, pp. 839-842.

II. AUTHORITY ANALYSIS

During 2011 and 2012, there were three major storms that each caused utility outages, which exceeded the highest number of service outages ever experienced in the state.1 The majority of service outages were caused by trees falling on overhead electrical distribution lines and broken utility poles. Connecticut is the fifth most forested state in the nation (72.6%), and leads the nation in the forest cover found in urban areas (67.4%). Connecticut has the highest percentage of forested land that has homes and trees in close proximity. This situation has evolved over the course of many decades. SVMTF Report, p. 8.2

A. UTILITY SERVICE TERRITORY

CL&P and UI are the EDCs that serve approximately 94% of state territory. The remaining 6% of the state’s area is served by municipal utilities. CL&P covers 87% of the geographic area of Connecticut and serves approximately 1.2 million customers. Decision dated August 21, 2013 in Docket No. 13-07-01, DPUC 2013 Annual Report to the General Assembly on Electric Distribution Company System Reliability, p. 3. CL&P's service territory includes urban, suburban, and rural areas with an extensive amount of wooded and hilly terrain. The rural area and high density of trees in much of CL&P’s territory can have a significant effect on its distribution system, both in terms of the design of many of the circuits and the performance of the circuits that traverse such areas. Id. UI covers 7% of the geographic area of Connecticut and serves approximately 320,000 customers. UI’s service territory includes predominantly urban

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1 In 2011, Tropical Storm Irene occurred on August 28, 2011, resulting in 815,000 total peak power outages, the October Snowstorm occurred on October 29, 2011, resulting in 832,000 total peak power outages. August 1, 2012 Decision in Docket No. 11-09-09, PURA Investigation of Public Service Companies' Response to 2011 Storms, p. 2. Storm Sandy occurred on October 28, 2012, resulting in 657,000 total peak power outages. August 21, 2013 Decision in Docket No. 12-11-07, PURA Investigation into the Performance of Connecticut’s Electric Distribution Companies and Gas Companies in Restoring Service Following Storm Sandy, pp. 5 and 26.

2 The SVMTF issued its final report on August 28, 2012.
and suburban areas, with one small rural area in Easton, Connecticut. Id. The Southern New England Telephone Company d/b/a AT&T Connecticut (AT&T) and Verizon New York, Inc. (Verizon) are the telephone companies that serve the state.3

B. TIMELINE OF STORM EVENTS AND REVIEWS

There were several reviews of the utilities’ preparation and restoration efforts for the three major storms conducted by consultants, taskforces and the Authority. As a result of those reviews, there were many requirements and recommendations to make the utility infrastructure more resilient to storm damage providing for shorter restoration times following outages. The recommendations included several actions for utilities to implement their vegetation management practices to reduce future infrastructure damage caused by falling trees and branches. Most of the reviews’ recommendations have been implemented by the utilities.

The following table is a chronological listing of the 2011-2012 major storm events and related reviews of utility performance in preparing for the storm and during the storm recovery.

<table>
<thead>
<tr>
<th>EVENT</th>
<th>REPORT/DOCKET REVIEW</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical Storm Irene, August 28, 2011</td>
<td></td>
<td></td>
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<tr>
<td>October Snowstorm, October 29, 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov. Malloy Announces Storm Disaster Preparedness &amp; Recovery Initiatives issued January 11, 2012</td>
<td>Docket No. 11-09-09, PURA Investigation of Public Service Companies’ Response to 2011 Storms, Decision issued August 1, 2012</td>
<td>Enhance and augment the ability of the state, municipalities and its partners to better prepare for and respond to natural disasters and intense weather situations</td>
</tr>
</tbody>
</table>

3 Verizon’s territory covers only a small portion of Greenwich.
<table>
<thead>
<tr>
<th>EVENT</th>
<th>REPORT/DOCKET REVIEW</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public Act No. 13-298, An Act Concerning Implementation Of Connecticut's Comprehensive Energy Strategy And Various Revisions To The Energy Statutes (Act), Signed by Governor Malloy on July 8, 2013</td>
<td>Section 60 of the Act, revised legislation to maintain utility protection zone and simplify electric distribution company tree pruning notification process.</td>
</tr>
<tr>
<td></td>
<td>Docket No. 12-11-14, PURA Investigation into the Performance of Connecticut's Telecommunications, Cable Television Providers and Water Companies in Restoring Service Following Storm Sandy, Decision issued on July 12, 2013</td>
<td>Evaluation of restoration efforts for Storm Sandy.</td>
</tr>
</tbody>
</table>
C. THE STATE VEGETATION MANAGEMENT TASKFORCE

The DEEP established and appointed the members of the SVMTF. Its mission was to develop standards for roadside tree care in Connecticut, vegetation management practices and schedules for utility rights of way, Right Tree Right Place (RTRP) standards, standards for tree wardens, municipal tree inventories and pruning schedules. SVMTF Report, p. 8.

The SVMTF Report contained a joint proposal by the EDCs recommending minimum line clearance standards to be adopted as part of the vegetation management plan. Id., pp. 47 and 48. The EDCs’ proposed standards are intended to protect each company’s primary electric lines and equipment during normal and severe weather. The EDCs’ proposed line clearance standards are appended hereto as Attachment C.

The EDCs proposed to file an annual vegetation management plan with the Authority that would include but not be limited to:

1. Work scope and budget details:

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4 There were 20 members assigned to the task force representing electrical and telecommunications utilities as well as state, municipal and private tree managers, non-profit environmental representatives and other experts.

5 The SVMTF did not analyze or endorse the EDCs’ proposed line clearance standards. SVMTF Written Exceptions filed December 13, 2013, pp. 2 and 3.
a. roadside miles scheduled, backbone and lateral;
b. right-of-way miles, brush control and side pruning;
c. risk tree removal;
d. vine control;
e. traffic control;
f. customer request tree work;
g. mid-cycle;
h. emergency restoration, minor storm; and
i. other.

2. Tree and brush work specification.
3. Line clearance organization.
4. Property owner notification and consent procedures.
5. The planned maintenance within each town within the EDC’s service territory.

ld., p. 46.

The Authority will direct the EDCs to provide the above information in their annual vegetation management plans and also require that the following information also be included:

6. Number of property owner/customer objections by town in prior year.
7. Number of property owner/customer objections by town in prior year accepted by the Tree Warden.
8. Number of property owner/customer requests for modifications and decisions reached.
9. Number of trees per town assessed to be hazardous or non-hazardous.
10. Number of property owners/customers who give affirmative consent versus non responses.
11. Number of mediations conducted and outcome of mediation.
12. Number of objections appealed to PURA by either the EDC or landowner and outcome.
13. Number of removals of non-hazardous trees.
14. Number of RTRP trees planted by the EDC, reasons for planting, costs.
15. Did property owner maintain the newly planted tree?
16. Number of stumps ground by EDC, reasons for stump grinding, costs.

The Authority plans to include the DFU in the review process for the annual vegetation management plans. The Authority will meet with the DFU in the coming months to determine how best to work with them in this review. Initial topics to be discussed will be the shared responsibility to evaluate the Vegetative Management Plans (VMP), additional data collection and the differences in vegetative management practices that are needed for utilization in urban, suburban and rural areas. The Authority may require additional data to be filed in its VMP after it meets with the DFU.
D. PUBLIC ACT NO. 13-298

Section 60 of the Act\(^6\) amended Conn. Gen. Stat. §16-234. In particular, Section 60 streamlined the approval process for vegetation-related work. The Act in part, established a Utility Protection Zone (UPZ) that extends horizontally for a distance of eight feet from any outer-most conductor or wire installed from utility pole to utility pole and vertically from the ground to the sky. Additionally, the Act addressed utility tree pruning and removal requirements, retention of compatible trees and shrubs, utility rights and a process for the abutting property owner to object to tree-related work. The terminologies “trim or cut” has been replaced with “prune or remove” and “tree owner” has been replaced with “abutting property owner.”

Further, the Act changed the requirement from “obtaining consent from the tree owner” to trim or remove a tree or shrub to “providing a notice to the abutting property owner” to trim a tree or shrub at least 15 business days in advance. Lastly, the Act included detailed information explaining how an abutting property owner can object to the trimming of a tree. Section 60 of the Act is appended hereto as Attachment B.

Conn. Gen. Stat. §16-234(c)(1) effective July 1, 2013, fostered several complaints from customers concerning property owners not receiving notification of vegetation management activities along their property pursuant to the three methods of notification contained in that statute. For vegetation management purposes, Conn. Gen. Stat. §16-234(c) (1) provides that:

…no utility shall prune or remove any tree or shrub within the utility protection zone, or on or overhanging any highway or public ground, without delivering notice to the abutting property owner. Notice shall be considered delivered when it is (A) mailed to the abutting property owner via first class mail, (B) delivered, in writing, at the location of the abutting property, or (C) simultaneously conveyed verbally and provided in writing to the abutting property owner. A utility shall deliver such notice to the abutting property owner…at least fifteen business days before the starting date of any such pruning or removal…at any time before any such pruning or removal, provided no utility may start such pruning or removal unless (I) the objection period…has been met, or (II) such property owner affirmatively waives, in writing, the right to object.

To ensure that property owners receive proper notice of vegetation management activities along their property, the Authority will require that the EDCs provide advanced written and timely notice to each property owner of pending vegetation management activities by email, fax or direct, personal contact. The Authority will also require that any customer who cannot be reached by email, fax or direct, personal contact by the EDC, shall be notified by certified mail with return receipt. The sender of the certified letter shall be identified as, “EDC name-Tree Trimming Notification.” Written confirmation of direct personal contact may be established by having the property owner initial the Company’s field notes of the notification meeting. The EDCs shall keep a record of when it made personal contact with the property owner. Specifically, each public service company undertaking tree trimming activities shall provide advanced written notification of the tree trimming activity. Such notice should be provided in advance of the work activity so that the property owner has sufficient time to consider all

\(^6\) Section 60 of the Act was codified on January 1, 2014, as Conn. Gen. Stat. §16-234.
alternatives to tree trimming and/or removal. First class mail does not provide written documentation that a notice was received. The EDCs must retain written documentation that a notice was received by each property owner by electronic, direct personal contact or certified mail for 24 months. The retention of written verification of vegetation management notifications shall begin no later than July 9, 2014.

E. **PUBLIC ACT NO. 14-151**

P.A. 14-151 passed the Legislature on May 7, 2014, and proposed a requirement to Conn. Gen. Stat. §16-32h that the Authority review the use of mediation in resolving objections to proposed activities relating to vegetation management and the circumstances in which stump grinding may be performed within the UPZ. P.A. 14-151 also required the utility to recover all reasonable incremental costs through the non-bypassable federally mandated congestion charge.

Additionally, P.A. 14-151 proposed that the DEEP review the vegetation management practices of each EDC. Further, within one year after the Authority completes its vegetation mediation review, and every two years thereafter, the Authority must submit a report to the General Assembly that reviews each EDC’s vegetation management practices.

Moreover, the bill proposed several changes to Conn. Gen. Stat. §16-234 relative to the processes that utilities must follow before conducting vegetation management. Changes include the provision of additional information that allows property owners to request modification to the proposed utility work, clarifying the due dates providing for property owner objection and providing for an option for a PURA mediation and hearing process. These changes are addressed in the Authority’s analysis below.

Lastly, P.A. 14-151 requires that each utility operate an electronic mail account to receive objections, requests for modification, inquiries or complaints related to its vegetation management program. P.A. 14-151 is appended hereto as Attachment C.  

F. **EDC VEGETATION MANAGEMENT PLAN**

The EDC vegetation management program includes everyday tree trimming on lateral wires to prevent the growth of vines and weeds. With ETT, limbs are pruned back from backbone wires and hazard trees are removed. The EDCs manage the tree trimming programs in the public right of way (PROW) through their private contractors, currently the Asplundh Tree Expert Company and Lewis Tree Service. Annually, each EDC files its tree trimming standards with the Authority. The most recent standards were filed in December 2013 in Docket No. 13-12-25, PURA Review of Electric Companies’ and Electric Distribution Companies’ Plans for Maintenance of Transmission and Distribution Overhead and Underground Lines (2014 Maintenance Plan).

Both CL&P and UI attested that they have adopted and incorporated the proposed SVMTF line clearance standards within their respective Vegetation Management Plans. CL&P Responses to Interrogatories EN-2 and EN-3; UI Vegetation Management Plan Distribution Plan Cycle, dated November 1, 2013, pp.

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The proposed line clearance standards were not endorsed by the SVMTF. SVMTF Report, p. 63.

1. **CL&P Program**

CL&P allows tree growth up to 10 feet below the lowest primary and no closer than 15 feet over the highest primary wire. Exceptions were allowed for branches having a diameter greater than six inches. Hazard trees having a diameter at breast height (DBH) less than 16 inches are required to be removed. The removal of any tree greater than 16 inches DBH must be approved by CL&P. CL&P 2013 Maintenance Plan, Appendix 3, p. 4, filed December 20, 2012.

CL&P’s ETT program has greater clearances around electric distribution facilities than the clearances in its scheduled maintenance program. CL&P Response to Interrogatory EN-1. CL&P will be moving from a five-year to a four-year cycle for scheduled vegetation maintenance, re-establishing ETT clearances on system backbones, performing ETT on laterals with large numbers of customers, removing risk trees, performing mid-cycle inspections and tree work, and performing vine removal on poles and guy wires. CL&P claimed that its system resiliency initiatives as related to vegetation management that were approved in the Decision dated January 16, 2013, in Docket No. 12-07-06 Application of The Connecticut Light and Power Company for Approval of Its System Resiliency Plan (CL&P Resiliency Decision), will reduce the impact of trees on the company’s infrastructure during storm events and improve day to day system performance. CL&P Brief, p. 2.

CL&P also indicated that over the next three years it will develop a Geographic Information System (GIS) based work planning and performance tracking system that will: 1) integrate several paper-based and disparate legacy systems; 2) continue to implement the program enhancements outlined in the CL&P Resiliency Decision; and 3) develop contracts that recruit, train and maintain a local tree worker labor force. CL&P Written Comments, pp. 2 and 7; CL&P Brief, p. 3.

2. **UI Program**

In the Decision dated August 4, 2013 in Docket No. 13-01-19, Application of The United Illuminating Company to Increase Rates and Charges, the Authority required UI, before the start of ETT work, to develop and submit to the Authority for review, a more carefully considered, optimized plan for ETT which: a) specifically addressed how the work is being packaged and prioritized for optimum effectiveness; and b) contained reporting requirements that included spending, miles trimmed and impacts on reliability of the program on a circuit and annual system basis. Decision dated August 4, 2013 in Docket No. 13-01-19, Order No. 8.

UI allows a minimum of 6-10 feet side clearance, 12-15 feet clearance from overhanging limbs, and 5-8 feet under the primary conductor. The three-phase portion of the system is trimmed on a four-year cycle, while the single-phase portion of the system is trimmed on an eight-year cycle or where performance triggers more frequent

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8 DBH is a measure of tree size where the diameter of the trunk is measured at four and one half (4-1/2) feet above the ground. SVMTF Report, p. 16.

9 On November 4, 2013, UI submitted the information in Docket No. 13-01-19, which is currently being reviewed by the Authority.
trimming. Any single-phase portion of the system that experiences two or more tree related outages in a 36-month period is, at a minimum, trimmed to minimize the potential for future outage. UI 2013 Maintenance Plan, p. 7, filed December 17, 2012.

UI’s hazard tree removal program is designed to remove trees identified as dead, dying, diseased or structurally defective and located outside of the normal trim area, but pose a potential hazard to UI facilities. Vine management involves the removal of various vines from poles and guy wires including the ground cut, removal, chip and disposal of debris. \[\text{Id.}\]

UI works with local tree wardens and civic and professional groups to help educate customers about the proper selection and care of trees that may be planted near UI’s electric facilities. Safety brochures are distributed annually through bill inserts, and other events are held to educate the public on the dangers associated with energized wires and the importance of having qualified tree contractors or UI line clearance crews remove hazardous tree growth. \[\text{Id.}, \text{p. 8}\]

UI indicated that it will revise its current program to create greater clearance between the vegetation and conductor to reduce the likelihood that a tree will impact the electric system during extreme weather events. Low height or ornamental trees that are already within the UPZ or those that are planted under a RTRP program will be allowed in the UPZ. Tr. 07/31/13, p. 108; UI Brief, p. 2.

UI claimed that its ETT program is expected to begin in June 2014 and has a variety of benefits. These include a reduction in safety risks associated with high tree/brush density/canopy along the roadside forest as well as a reduction in Operations and Maintenance expense for future maintenance trimming as the cycle maintenance requirements will be reduced to branch trimming. UI claims its ETT program would reduce the total number of customers affected and total restoration time by 25-50% for future storms as severe as the Tropical Storm Irene and Storm Sandy events. Tr. 07/31/13, p. 109; UI Brief, p. 2.

3. **EDC Vegetation Management Plan Costs**

The EDCs increased the amount of tree trimming work since 2011 to harden their distribution systems. The EDCs proposed plans in 2013 to significantly increase vegetation management expenditures over the next five to eight years.

In the Decision dated June 30, 2010, in Docket No. 09-12-05 Application of The Connecticut Light and Power Company to Amend Its Rate Schedules (CL&P 2010 Rate Case Decision), CL&P was allowed $24.6 million for annual tree trimming ($21.5 million for expense and $3.1 million for capital spending) to be collected through rates for 5 years. CL&P 2010 Rate Case Decision, p. 37; Response to Interrogatory EL-11 in Docket No. 09-12-05.

In the CL&P Resiliency Decision, the Authority permitted CL&P to increase its total tree trimming expenditures by $191 million during 2013 through 2017 ($35 million for maintenance tree trimming and $156 million for ETT program). CL&P Resiliency Plan Decision, p. 7; Late Filed Exhibit No. 2 filed in Docket No. 12-07-06. Thus, over
the next 5 years, CL&P will spend $314 million [($24.6 million x 5 = $123 million) + $191 million] for vegetation maintenance.

In 2011, UI spent $5.0 million on tree trimming. UI Response to Interrogatory EN-31 in Docket No. 12-06-09, PURA Establishment of Industry Performance Standards for Electric and Gas Companies. In the Decision dated August 14, 2013 in Docket No. 13-01-19 on page 14, the Authority approved UI’s $100 million ETT program to be carried out over 8 years (at $12.5 million per year).

The Authority recognizes that there could be incremental cost increases and schedule impacts associated with the implementation of P.A. 14-151 that became effective after the EDC budgets were authorized by the PURA. Therefore, the Authority will require the EDCs to submit a summary of the cost, schedule and any other impacts associated with the implementation of Public Act 14-151 in its 2015 T&D Maintenance Plan. The Authority will also review any associated cost increase for CL&P in Docket No. 14-05-06, Application of The Connecticut Light and Power Company to Amend Rate Schedules.

4. Clean-Up and Disposal

CL&P requires its contractors to make every effort to minimize the amount of wood and wood chip hauled away from the work site. This can be accomplished by making arrangements with property owners to leave logs and larger limbs at the site for use as firewood, blowing chips onto the ground and in rural and unimproved natural locations, offering the chips to property owners for use as mulch. Where chips cannot be left on site, they must be transported to the nearest appropriate disposal space. Normally, the site shall be cleaned up daily and left in at least as neat and orderly condition as it was found. All debris must be disposed of in accordance with all local laws and regulations. CL&P 2014 Maintenance Plan, Appendix 3, pp. 2, 7 and 8.

Additionally, logs from tree trunks and larger limbs must be cut into mutually agreed upon or convenient handling lengths. No logs can be split. Logs must be left at the work site in a safe location, not pose a hazard to anyone for a maximum of seven days, during which time they will be available for anyone to pick up. Any logs remaining after seven days must be delivered to the appropriate disposal site. Id., p. 8. Contractors may not leave cut-off brush overnight except on off-road sections. The contractors cannot sell any unwanted logs or chips directly from their trucks during the normal scheduled workday. Id.

UI requires its contractors to completely remove all brush and debris from the work area. Brush or wood cannot remain on public thoroughfares or on private property overnight unless arrangements have been made by the contractor’s crew leader or UI supervisor with the proper authorities or property owner. All line clearance by-products must be disposed of at approved sites and in the most economical manner. Brush or wood may not be burned. UI 2014 Maintenance Plan, p. 37. The removal of brush and debris resulting from a storm is normally not the utility contractor’s responsibility, unless otherwise authorized by UI. Id.
The Authority is interested in the economic value of the tree wood as a potential offset to the cost of the VMPs. Because it was not fully explored in the proceeding, the Authority will direct CL&P to provide a status report on the University of Connecticut’s (UCONN) Stormwise study of the value of the wood from removed trees and large limbs and file the results of the study with the Authority when it is completed. Tr. 3/5/14, p. 349.

Both towns and utility contract line clearance tree crews work together to remove hazardous trees. UI Response to Interrogatory EN-11. On occasion, the EDCs and towns make arrangements to work together where the EDC will prune or remove the tree and the towns cleans up and discard the wood. Providing its VMP and work schedule to the towns so that they may schedule and coordinate their work is one way for the EDC to reduce their total costs. Consequently, the Authority directs the EDCs to work together with the towns to coordinate their vegetation management work to reduce vegetation management costs to ratepayers, tax payers, utilities and municipalities.

G. **AUTHORITY MODIFICATIONS TO THE EDC MANAGEMENT PLAN**

Conn. Gen. Stat. §16-234(b) also raised a high level of public concern. Conn. Gen. Stat. §16-234(b), as amended by P.A. 14-151 states:

A utility may perform vegetation management within the UPZ, as necessary, to secure the reliability of utility services. (Emphasis added). Vegetation management means the retention of trees and shrubs that are compatible with the utility infrastructure and the pruning or removal of trees, shrubs or other vegetation that pose a risk to the reliability of the utility infrastructure.

Conn. Gen. Stat. §16-234(b) provides that vegetation management activities may be performed in the UPZ as necessary to ensure the reliability of utility services which may necessitate the pruning or removal of trees on the opposite side of the street or PROW which is outside the UPZ. Thus, the Authority expects the utility companies to use alternative solutions (other than the outright removal of vegetation) within the UPZ whenever conditions permit. In response to the SVMTF Report, the EDCs proposed tree clearance standards. A copy of those standards are appended hereto as Appendix D. The Authority has reviewed those standards and finds them acceptable with the following modifications.

1. **Line Clearance Requirements**

The Authority will require the EDCs to modify their line clearance standards to incorporate the requirements of P.A. 14-151 as indicated below:

1. Routine maintenance tree and brush work (tree pruning) shall be performed on a four-year cycle. All roadside and off-road primary voltage lines shall be cleared at least once every four years.

2. The UPZ shall be the area eight feet to the side of all primary conductors from the ground to the sky. The 8 foot line clearance dimension is a starting point for evaluation of the UPZ. The actual distance will result from the required cut of the tree so that a healthy tree remains.
a. Enhanced clearance shall be performed, subject to paragraph 4 below, to achieve the following clearances on all circuit backbone and lateral conductors selected for enhanced tree work: i) remove all tall growing tree species below the infrastructure within the UPZ; and ii) remove all overhanging limbs within the UPZ.

ETT with Compatible Trees in the UPZ

b. Scheduled maintenance clearance shall be performed, subject to paragraph 4 below, to achieve the following clearance around all primary voltage conductors not selected for enhanced tree work: i) 10 feet below within the clearance zone, and ii) 15 feet overhead within the clearance zone.

3. Remove hazard trees within the UPZ and on private property after obtaining the private property owner’s written consent.

4. Retention and planting of compatible trees and shrubs in the UPZ:

   a. Each tree shall be evaluated by the EDC at least 10 days prior to sending a notice and by the tree crew at the time that it is pruned. The EDC shall consider tree species, condition, growth rate and failure characteristics, PROW limitations, tree location, the potential combined movement of vegetation and conductors during routine winds, and sagging of conductors due to elevated temperatures or icing when performing line clearance.

   b. Pruning of vegetation shall be performed in a manner that retains the structural integrity and health of the vegetation.
c. The EDC shall consider critical loads and the number of customers on the circuit served downstream of the pruning area.
d. Any non-hazardous tree located in whole or in part within the UPZ may be retained, provided that its species, condition and growth rate indicate that pruning without removal will reduce the risk of harm to the utility infrastructure.
e. Compatible trees and shrubs listed in the SVMTF Report or added by the DEEP in the future may remain in or be planted in the future in the UPZ.

5. Written consent shall be obtained from the tree owner to prune or remove a tree on private property.
6. No tree shall be pruned in the PROW without a permit from the tree warden.
7. A written permit must be obtained from the local tree warden to remove a tree in the PROW.
7. Clearance shall be performed in accordance with the following tree care industry standards:

   Id., pp. 46 and 47.

The Authority will direct each EDC to incorporate the vegetation management plan and line clearance standards in its annual Maintenance Plan filings. VMPs must be comprehensive and flexible to accommodate the many vegetation differences across the state. For work to be performed under the line clearance standards, the EDC must consider the diversity of vegetation in urban, suburban and rural areas in determining the necessary pruning required to ensure reliability in those areas. The Authority will monitor the EDCs’ annual vegetation management plans and their actual achievements through the annual maintenance dockets and rate case proceedings. In addition, The Authority will require each EDC to include a schedule of its ETT work plan activities to be completed for each town in its VMP. The EDC should provide the municipalities its vegetation maintenance work plan so they can more efficiently schedule and coordinate their tree work with the EDC trimming schedule in their respective towns.

The OCC stated that UI and CL&P and their contractors should be alerted to those situations that may result in creating “hazard trees” due to excessive pruning when making trees safer for storm events. A hazard tree may be created when a healthy tree is overly pruned or a substantial part of it is removed. OCC Brief, p. 4. In implementing the vegetative management program within the UPZ, the utility companies and their contractors should be mindful of this risk and remove the entire tree if pruning would create an unhealthy or a hazard tree condition.

Any compatible tree that is in the UPZ and is on the SVMTF list of RTRP, as described in Section II. I., Right Tree, Right Place Program, below, shall remain and be properly trimmed unless there is a special circumstance requiring its removal. For conditions where trees require extensive pruning (shaving) on one side of the tree, the EDC shall inform the property owner of the specific type of pruning required, the resulting aesthetics and health of the tree and its potential to fall compared to complete
removal before a contractor begins to prune the tree. When service reliability and safety conditions permit, the EDC may relax its ETT standards to allow tall healthy trees to remain in the UPZ. While such trees should be properly pruned, they need not be removed if the tree location is at the end of a line, does not affect downstream customers nor serves critical loads.

2. Notification of Vegetation Management Activities

P.A. 14-151 requires that no utility shall prune or remove any tree or shrub within the UPZ or on or overhanging any public road, public highway or public ground, without providing notice of the proposed vegetation management to the abutting property owner or private property owner. That notice must include an option for the abutting property owner or private property owner to consent, in writing, to the pruning or removal, an option to object to the proposed pruning or removal or the ability to modify the pruning or removal. The notice must also include instructions regarding how the recipient may object. If requested by an owner of private property, the utility, municipality or the Commissioner of Transportation, must provide the owner with information regarding whether a tree or shrub to be pruned or removed is in the public right-of-way or whether such tree or shrub is on the owner's private property.

The notice will be considered delivered to the abutting property owner or private property owner when it is: (a) mailed via first class mail, electronic mail or text message; (b) delivered, in writing at the location of the property owner; or (c) simultaneously expressed verbally and provided in writing. A utility must deliver notice to the abutting property owner or private property owner at least 15 business days before the starting date of pruning or removal.

The notice must indicate that: (a) an objection to pruning or removal must be filed, in writing, with the utility and either the tree warden of the municipality or the Commissioner of Transportation, as appropriate, not later than ten business days after delivery of the notice; and (b) the objection may include a request for consultation with the tree warden or the Commissioner.

No utility is required to provide notice if the tree warden of the municipality or the Commissioner, authorizes in writing, pruning or removal by the utility of a hazardous tree within the UPZ or on or overhanging any public highway or public ground. If the hazardous tree is outside of the public right-of-way, the utility must make a reasonable effort to notify the property owner of the proposed pruning or removal at least three days prior to performing pruning or removal. There are no requirements in this subsection that require a utility to prune or remove a tree.

H. Objection, Mediation and Hearing Process

Conn. Gen. Stat. §16-234(c)(4), as amended by P.A. 14-151, provides a process for abutting property owners to object to the EDCs’ tree pruning or removal proposal or request for modification by filing a complaint with either the local tree warden or the Commissioner of Transportation. In the event that an abutting property owner remains
dissatisfied following a filing of their formal complaint with the tree warden or, the abutting property owner may appeal to the Authority for final resolution. P.A. 14-151 requires the Authority to hold a hearing within 60 calendar days of receipt of an abutting property owner's or utility's written appeal of the tree warden's decision. The Authority may authorize the pruning or removal of any tree or shrub at issue in the hearing if it finds that public interest requires such action. The burden of proving public interest is the responsibility of the utility.

Additionally, P.A. 14-151 requires that the Authority complete a review for the use of mediation to resolve objections to proposed vegetation management activities and when stump grinding may be performed within the UPZ. Following that review, the Authority will designate an entity to oversee the mediation sessions as determined in the review. Those sessions must be held not later than 30 calendar days after receipt of an abutting property owner or utility appeal of the tree warden's or the Commissioner's decision. Also as part of P.A. 14-151, the abutting property owner has an option to directly proceed to a PURA hearing.

When the appeal is not settled by mediation, or the abutting owner elects not to use a mediation session, the Authority must hold a hearing not later than 30 calendar days after the conclusion of the mediation session, or within 60 calendar days when there is no mediation session. The Authority may authorize the pruning, removal or stump grinding of any tree or shrub in the hearing if it finds that public interest requires such action. The burden of proving public interest is on the utility.

When an objection or request for modification has been filed, no tree or shrub subject to the objection or request for modification may be pruned or removed until a final decision has been reached. The Authority may request the DFU to participate in its review of an appeal to the PURA and seek recommendation(s) for required work to resolve the matter. The Authority will meet with the DFU to determine how it can assist the PURA when reviewing the EDCs’ annual vegetation management plans. This may be an opportunity for the DFU to issue and update its standards for identifying compatible trees and shrubs. The DFU also will be requested to advise the Authority of industry training programs concerning utility maintenance and best practices for care of the roadside forest. The Authority strongly supports the notion that property owner suggestions and objections to proposed vegetation management work be resolved at the local level.

I. **RIGHT TREE, RIGHT PLACE PROGRAM**

The RTRP program is an educational program that identifies compatible trees that can be planted under or alongside utility lines. Compatible trees have a short height and will not grow into the trim area for the EDC lines.\(^\text{10}\) The EDCs currently promote this program with their customers through bill inserts and on their websites. The program also illustrates non-compatible trees and how close they can be planted near the utility lines. The Authority encourages the EDCs to continue the promotion of the RTRP program.

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\(^{10}\) The SVMTF listed a number of comparable trees with short mature heights. SMVTF Report, pp. 40-44. Until new standards are issued by the DEEP for identifying such comparable trees and shrubs, P.A. 13-298 requires that the SVMTF’s listing is followed. Act, Section 60(a)(4).
Similarly, the Authority urges municipalities to continue to incorporate the RTRP guidelines in their ordinances and regulations. Tree Wardens should be informed of new property developments and be involved in their plans to assist in having compatible trees planted near utility lines and having non-compatible trees planted a safe distance away from utility infrastructure so as they mature, their fall zone will not enter the UPZ.

J. OTHER ISSUES AND RECOMMENDATIONS

A number of issues were not resolved by the SVMTF. Should the SVMTF be reconvened, the Authority recommends that it address the following issues.

1. Private Property Owners’ Responsibility

CL&P indicated that the Act did not specifically address tree owner responsibility and liability for trees that cause damage to the company’s facilities. Since the storms of 2011, numerous experts and consultants have concluded that the condition of the trees growing alongside CL&P’s conductors has deteriorated and presents a growing risk to utility infrastructure. A key issue remaining to be addressed is the need for public and private tree owners to take an active role in maintaining trees along public roadways. 

CL&P Brief, p. 4. CL&P contended that roadside tree maintenance should not be the responsibility of the electric utilities only. A well-maintained roadside forest would reduce the number and duration of power outages and blocked roads as a result of tree failures. It is more cost effective to maintain trees than it is to restore damaged infrastructure.

CL&P contended that public and private tree owners should be responsible for maintaining their trees within the rights of way and should be held responsible for resulting claims should their successful objection to line clearance work result in tree failure and damage. Id.

The SVMTF concurred with CL&P regarding trees on private property that have potential to fail and impact public safety. It recommended that those trees be maintained by the owners of those trees. SVMTF Report, p. 35.

Damage from trees located on private property adjacent to utility infrastructure remains problematic since these trees are not under the control of the utilities except for the branches that overhang the PROW. In the opinion of the Authority, the participation by private property owners would lead to improved reliability, safer roads, less cleanup costs and faster restoration.

2. Traffic Control

CL&P indicated that traffic control remains a large and growing cost within the overall vegetation management program. Given the fact that trees within the PROW are typically within the jurisdiction of the local tree warden, CL&P contended that the towns requiring police officers to provide traffic control during vegetation management activities should provide such services at no cost to CL&P. This would incent the towns to deploy traffic control resources more efficiently and cost effectively, ultimately reducing costs to customers. CL&P Brief, p. 5.
The SVMTF estimated that 20-25% of all vegetation management funding by CL&P and UI is for “traffic control” and other expenses at work sites rather than for tree care. Traffic control expenses (which represent over 50% of these non-vegetation management costs) should be reviewed to ensure vegetation management funding goes toward its intended purpose. The SVMTF recommended that municipalities provide the traffic control or ensure the traffic control services are provided at straight time rather than overtime rates for either flag crews and/or police. SVMTF Report, p. 24.

The OCC recommended that the current traffic control requirement, (i.e., uniformed police officers be hired to provide traffic control services) be revised. The use of uniformed police officers places a significant cost burden on any initiative as it affects line crews. Qualified traffic control service providers can fill this need more cost-effectively. OCC Written Comments, p. 2; Goodfellow and Townsley PFT, pp. 57 and 58.11

UI requested that the Authority undertake an analysis of the methods by which traffic control costs can be reduced, including allocation of those costs directly to the customers of the municipality responsible for the increase. UI Brief, p. 4.

The Authority agrees that traffic control expenses should be reduced though the use of traffic control service providers (i.e., qualified flagmen). The Authority recognizes that there are many towns that do not require police officers to conduct traffic control. For towns that do have such requirements, the Authority recommends that they reconsider the use of public officers and utilize qualified flagmen in their place.12 The Authority will not be performing a traffic control analysis in this proceeding and suggests that this issue be explored further in each EDC’s next rate proceeding.

3. Statewide Tree Ordinance

The SVMTF recommended that municipalities develop five-year roadside forest management plans (based upon a model ordinance) that includes tree pruning and removal guidelines for trees along public roads. They should also develop standards for tree planting that include the avoidance of overhead and underground power and communications lines, road signals and/or the obstruction of other state, municipal or private infrastructure. SVMTF Report, p. 6.

The Authority recognizes that some towns do not have tree ordinances and that this issue could be addressed by the state legislature. One solution to this issue might be the development of a statewide ordinance that would be more efficient for stakeholders to comply with rather than 169 individual town ordinances. Towns should also have the ability to supplement the state ordinance for their respective needs.

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11 The OCC requested administrative notice of its consultant pre-filed testimony dated April 17, 2012 that was filed in Docket No. 11-09-09.

12 CL&P spends approximately 10% of its tree trimming budget on traffic control. UI estimates that there is an approximately $25 per hour difference between the costs for a traffic control service provider’s contract flagger and the cost for a police officer. Tr. 07/31/13, pp. 209 and 210.
4. State-Wide Reference Site for Management of Trees

Currently there is no one website that provides all the information necessary for the management of trees along the PROW. A possible website could be administered through the DFU with links to the EDCs, town tree wardens and industry websites.

5. Tree Stump Grinding and Replacement Tree Costs

Several customers proposed that the EDCs grind the stump remaining from every removed tree and replace it with a new one. Tr. 3/27/14, p. 811. During the March 27, 2014 Technical Meeting, the Authority requested that the EDCs estimate the cost of stump grinding for every removed tree. Id., p. 743.

CL&P testified that the costs to stump grind a removed tree, including top soil and seed and to replace it with a new tree would cost approximately $800 to $900. Id., p. 745. Based on that cost, stump grinding and tree replacement would add approximately $16 to $20 million to CL&P’s 2013 VMP that had expended $58 million. Id. CL&P expressed concern that these increased costs would benefit only a few but would have to be recovered from all of its customers. Id., p. 742. Although there have been special circumstances where CL&P has replanted trees, it is not its general policy to replant trees and has no plans to do so under its vegetation management program. Tr. 3/5/14, pp. 380 and 381.

UI testified that it does not replace many of the removed trees due to its estimated replacement costs. In particular, UI estimated its cost to remove a tree at approximately $260. The cost of stump grinding which also included the costs for top soil, seed and removal of the grindings would average $285 per removed tree. The average cost for a replacement tree is approximately $300. Id., pp. 744 and 747. Thus, if all removed trees are replaced with a total cost of approximately $845 per tree, UI approximately estimated its 8-year tree trimming budget would increase by $168 million. Id., pp. 752 and 753. Moreover, UI stated that in many cases, towns would not want to maintain the replacement tree or are concerned that the tree would uplift the sidewalk. Id., pp. 747 and 748.

Mr. Karl Reichle, who served over 27 years as Tree Warden for the Town of South Windsor, testified that stump grinding costs could become excessive and would easily erode a tree maintenance budget. Once a tree was removed and the stump flush cut, the danger to the citizens of that tree was removed. He estimated that about a dozen stumps have been ground over the last 20 years in South Windsor due to their cost. Id., p. 752.

The Authority seriously considered these recommendations. Due to the large increases required for the annual VMP, the Authority agrees that it is too costly to stump grind tree removals unless the stump causes a safety hazard. While aesthetics, economic and environmental impacts are a very important consideration, the costs of these recommendations to all ratepayers far outweigh the benefit that each may provide to a small number if adopted by the Authority. Accordingly, the Authority will defer any additional stump grinding or tree replacement activities currently budgeted for by the EDCs until it completes its investigation of the circumstances as to when stump grinding may be performed in the UPZ.
K. Bradford Pruning Complaint

A property owner, Susan Bradford, claimed that CL&P did not provide advance notice to trim her trees and that the trees were excessively pruned. Bradford Written Complaint dated July 12, 2013. As a follow-up and addendum to her complaint, Ms. Bradford submitted a prepared report by an arborist consultant regarding her personal property damages done by CL&P. Bradford Written Complaint dated September 18, 2013.

CL&P testified that it was in the process of conducting an investigation of the complaint. Tr. 07/31/13, pp. 215 and 216. The Authority will require CL&P to report the results of its investigation and follow-up action with Ms. Bradford to the PURA no later than 15 business days following the completion of that investigation report.

L. Utility Infrastructure

There are 846,065 utility poles in the AT&T service area. Of this number, AT&T solely owns 16,972, jointly owns 803,106, and the remaining 25,987 utility poles are owned by the EDCs. AT&T is custodian of approximately 388,507 of the jointly-owned utility poles. There are 12,587 utility poles in the Verizon service area. Of this number, Verizon is the sole owner of 355 and joint owner of 12,232 utility poles with CL&P. Decision dated July 12, 2013 in Docket No. 12-11-14, pp. 7 and 10.

1. Electric and Communications Gains

The electric gain is typically located on the upper seven feet of a utility pole and is reserved for electric power line facilities. Below the 7-foot spacing is a 40-inch neutral zone. The neutral zone is required by the National Electrical Safety Code (NESC) to provide adequate work space clearance for the safety of utility company employees working on the pole and to separate the electric power lines from those attached in the communications gain. The communications gain is comprised of a number of attached facilities for purposes of communications. Within the communications gain are facilities (in order of attachment) for state and/or municipal purposes, cable television (CATV) and certified telecommunications providers. The facilities located at the bottom of the communications gain, approximately 15.5 feet above ground level, are owned by AT&T or Verizon.

2. Telephone Company Vegetation Management Program

AT&T only trims branches as necessary when trees interfere with the company’s ability to place or replace existing facilities. In some cases, AT&T technicians trim and remove tree branches when attaching or replacing its aerial telecommunications facilities on the utility poles. If the technician identifies a dangerous tree condition or when tree branches are larger than the technician can safely remove, AT&T utilizes certified tree contractors to trim the trees prior to attaching its facilities to the utility poles. In these situations, AT&T bears the cost for the work. AT&T Response to Interrogatory EN-31.
AT&T employees notify the appropriate managers of the existence of hazard trees or when tree trimming requires the services of an experienced contractor. Field personnel are encouraged to notify managers when encountering these situations. The company indicated that its tree trimming policies are generally consistent with those in the other states where AT&T owns or jointly owns facilities. \textit{Id.; AT&T Written Comments, p. 4.}

Verizon has no vegetation maintenance program and does not trim trees under normal circumstances. If a tree is on private property, trimming is the property owner’s responsibility. Similarly, if the tree is on public property, then it is the town’s responsibility for tree trimming. In the event that a property owner discovers a potential safety issue, hazardous conditions, or service-affecting conditions caused by tree limbs lying on Verizon lines, Verizon will investigate the report and if warranted, hire a local contractor to perform the necessary work. Verizon has no plans at this time to implement a formal tree trimming program. Verizon Response to Interrogatory EN-30; Verizon Written Comments, p. 1.

As noted above, most utility poles in Connecticut are jointly owned by the EDC and the telephone company. Approximately half of all utility poles that support electric facilities are maintained by the EDCs while, depending upon the service area, the remainder are maintained by AT&T and Verizon.

AT&T and Verizon perform vegetation maintenance only on an as-needed basis. This is problematic because proper vegetation maintenance is not performed consistently across the companies’ service territories. Unattended trees, branches and bushes that grow into or near the communications gain could damage the companies’ and other facilities placed on the poles, by other service providers who pay to attach their facilities to the utility pole. Compliance with the NESC requires the utilities to perform regular tree trimming which should minimize service outages that could result from fallen trees and branches. Trees and branches in the electric and communications gains also hinders the ability of utility companies and other attachers to perform their day-to-day work or following emergency events, to effectively restore service.

Similar to the EDCs, AT&T and Verizon file with the Authority their annual utility pole maintenance practices and pole inspection results. Absent from those reports are each company’s tree trimming practices.\textsuperscript{13} Therefore, in light of the above and pursuant to Conn. Gen. Stat. §16-11, the Authority will require AT&T and Verizon to incorporate their maintenance tree trimming plan activities into their annual utility pole maintenance plan reports to promote greater public safety and reliability of utility systems.

AT&T and Verizon contended that Section 218 of the NESC does not apply to communications facilities.\textsuperscript{14} AT&T and Verizon argued that there are no other requirements within the NESC addressing vegetation management that are applicable

\textsuperscript{13} August 1, 2012 Decision in Docket No. 11-09-09, Order No. 25.

\textsuperscript{14} Section 218 of the NESC, Vegetation Management, provides that: 1) Vegetation that may damage ungrounded supply conductors should be pruned or removed. Vegetation management should be performed as experience has shown to be necessary. \textit{NOTE:} Factors to consider in determining the extent of vegetation management required include, but are not limited to: line voltage class, species' growth rates and failure characteristics, right-of-way limitations, the vegetation's location in relation to the conductors, the potential combined movement of vegetation and conductors during routine winds, and sagging of conductors due to elevated temperatures or icing. 2) Where pruning or removal is not practical, the conductor should be separated from the tree with suitable materials or devices to avoid conductor damage by abrasion and grounding of the circuit through the tree.
to the telephone companies and that nothing in the NESC standards requires the telephone companies to implement formal preventative tree trimming or vegetation management program to protect their communications facilities. AT&T Written Exceptions, pp. 16 and 17; Verizon Written Exceptions, p. 4.

The OCC asserts that although there is no risk of tree contacts causing electrical faults on telecommunications lines, the structural failure of trees can cause damage to overhead telecommunications lines. The nature of large bundled paired telecommunications cables also increase the likelihood of pole failures, rather than just downed electric conductors, when trees fail. OCC Written Comments, p. 2; Goodfellow and Townsley PFT, p. 9.\(^{15}\)

The Authority concurs with the OCC. Interpretation of the NESC indicates that contact between wires and trees should be avoided to minimize physical abrasion. For instance, lashing wires, used to attach communication cables to messengers, can be damaged by physical abrasion, which in turn can cause the cable to drop. Mature limbs growing into communication cables could create structural loading to the pole structures and associated wires, especially during storm loading from ice and/or wind on trees. Significant loads from unpruned trees contacting wires and cables can potentially damage facility structures. The Authority requires adherence to the NESC standards as minimum requirements as they are a guide to good practice in all cases including those not governed by specific Authority Decisions. The Authority has consistently held the utility pole owners and other attachers to maintain their facilities in public rights of way, including vegetation management.

3. Vegetation Maintenance Plan Cost Sharing

CL&P contended that AT&T relies on CL&P to prune and remove trees for both normal maintenance and during emergencies. AT&T does not however, reimburse CL&P for any of the ongoing scheduled maintenance tree trimming expenses. When large trees are damaged and fall, they can cause damage to utility poles and other attached facilities. Blocked roads can also be a significant problem. Consequently, CL&P requested that AT&T pay a larger portion of the costs associated with this maintenance work. CL&P Response to Interrogatory EN-29. CL&P also requested that the Authority consider the approval of a new charge in its next rate case that ensures other utility pole owners and attachers compensate the company for the rising costs of both routine and storm-related vegetation management. \(^{16}\)

UI stated that telecommunications company customers benefit from its current vegetation maintenance activities, but only its customers are paying for them. UI Written Comments, pp. 6 and 7. UI suggested that the recovery of its tree trimming costs from all utility pole attachers is an appropriate topic for the Authority to consider at a technical session or as a separate docket. UI Brief, p. 5.

Verizon argued that vegetation maintenance cost issues be addressed in the context of renegotiating all of the rates, terms and conditions of its agreement with CL&P. Verizon Response to Interrogatory EN-35.

\(^{15}\) The Authority granted the OCC’s request to take administrative notice of its consultant’s pre-filed testimony dated April 17, 2012, which was filed in Docket No. 11-09-09.
AT&T claimed that cost allocation between AT&T and UI is addressed in its agreement and that UI has not offered any statutory authority on which the PURA may order a change to the terms of that agreement. AT&T Reply Brief, p. 1. AT&T disagrees with the UI and CL&P claim that telecommunications company customers benefit from the current maintenance activities but only the EDC customers are paying for the costs because it ignores the contractual terms between the parties and ignores the fact that the electric companies serve all customers while telecommunications companies do not. AT&T also claimed that the EDCs recover these costs through the return on their rate base and as part of their third party attachment fees. AT&T also argued that, as a UI and CL&P customer, it already pays for these activities in its rates for commercial power. AT&T Response to Interrogatory EN-35.

Recent storm investigations conducted by the Authority have found that the primary hindrance to service restoration resulting from the storms was the extensive number of downed trees causing damage, restricting travel and massive and widespread commercial power outages. In a previous Decision, the Authority determined that approximately 80% of all outages during major storm conditions are caused by tree and limb contacts with poles and wires. Decision dated November 1, 2012 in Docket No. 12-06-09, p. 12. Extensive tree damage also hindered the EDCs, telephone companies and other utility pole attachers’ efforts to restore their respective services. Additionally, falling trees and branches caused utility outages with significant costs. This is an issue affecting all companies and their respective customers. Thus, all companies/attachers should share in the responsibility of proper vegetation management and in the costs associated with that management.

Section 60 of the Act defines “vegetation management” as the pruning or removal of trees, shrubs or other vegetation that pose a risk to the reliability of the utility infrastructure, and the retention of trees and shrubs that are compatible with the utility infrastructure. Utility means any telephone, telecommunications, electric or electric distribution company. The legislature and the Authority mandated improved vegetation management by utility companies to maintain utility pole line routes. The utility pole owners share vegetation management and joint tree trimming responsibilities based on Joint Line Agreements (Agreements) that date back to the 1950s (CL&P and Verizon) and the 1990s (CL&P and AT&T and UI and AT&T). Those agreements reflect negotiated terms and conditions and identify the party responsible for performing vegetation management and joint tree trimming. Each utility pole owner is responsible for its own tree trimming (e.g., vegetation maintenance), and there is no sharing of the costs associated with this work. AT&T Response to Interrogatory EN-31; Verizon Response to Interrogatory EN-33.

In the opinion of the Authority, the EDCs and the telephone companies should revisit their respective Agreements and collaboratively resolve the cost sharing issues. The Authority notes however, that Docket No. 14-01-46, Joint Application of Frontier Communications Corporation and AT&T Inc. for Approval of a Change of Control, has been opened to investigate the acquisition of the Southern New England Telephone Company (SNET) by Frontier Communications Corporation (Frontier). While Verizon and CL&P may discuss changes to their Agreements, discussions with SNET and the EDCs for purposes of updating their respective Agreements may wait, pending the conclusion of Docket No. 14-01-06. Thus, the Authority will require the EDCs to initiate

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16 Copies of the Agreements between the electric and telephone companies were filed as Late Filed Exhibit No. 4 in this proceeding.
discussions with Frontier/SNET no later than December 1, 2014, regarding the possible update to their Agreements for vegetation management plan’s cost sharing purposes. The Authority may intervene in those discussions in the event revised Agreements cannot be reached and after all options have been exhausted.

III. FINDINGS OF FACT

1. On July 8, 2013, Governor Malloy signed Public Act No. 13-298 into law.

2. The Act changed the requirement from “obtaining consent from the tree owner” to trim or remove a tree or shrub to “providing a notice to the abutting property owner” to trim a tree or shrub at least 15 business days in advance.

3. The Act included detailed information as to how an abutting property owner can object to the trimming of a tree.


5. The SVMTF mission was to develop standards for road side tree care in Connecticut, vegetation management practices and schedules for utility rights of way, RTRP standards, standards for tree wardens, municipal tree inventories and pruning schedules.

6. The EDCs are responsible to clean up the site and dispose of all chips and wood resulting from maintenance work.

7. The EDCs proposed a vegetation management plan and line clearance standards to the SVMTF that should be the minimum requirements for each EDC.

8. The EDCs manage the tree trimming programs in the PROW through their private contractors.

9. The EDCs have increased the amount of tree trimming work since 2011 to harden their distribution systems

10. CL&P was authorized to increase its total tree trimming expenditures by $191 million during the 2013-2017 time period.

11. UI was granted a $100 million for its ETT program to be carried out over eight years (at $12.5 million per year).

12. The SVMTF recommended that trees on private property that have potential to fail and impact public safety be maintained by the owners of those trees.

13. The SVMTF estimated that 20-25% of all vegetation management funding by CL&P and UI goes to “traffic control” and other expenses at work sites rather than to tree care.
14. The SVMTF recommended that municipalities provide the traffic control or ensure the traffic control services are provided at straight time rather than overtime rates for either flag crews and/or police.

15. The electric gain is typically located on the upper seven feet of the utility pole and is reserved for electric power line facilities.

16. The communications gain is comprised of a number of attached facilities for purposes of communications.

17. AT&T and Verizon perform vegetation maintenance only on an as-needed basis.

IV. CONCLUSION AND ORDERS

A. CONCLUSION

In light of the reviews and recommendations from the SVMTF reports, legislative mandates and the Authority requirements, the EDCs’ approved vegetation maintenance plans have resulted in a significant increase to their budgets for their annual vegetation management programs over the next five to eight years.

The EDCs were directed to incorporate legislative mandates from the Acts and their proposed standards to the SVMTF, as amended by the Authority, into their annual system maintenance plans. Increased education for the public on compatible plant trees through the RTRP program would significantly help to prevent infrastructure damage from falling trees and future pruning costs.

Falling trees and branches caused utility outages with significant costs and increased public safety expenses. This is an issue affecting all companies and their respective customers. Thus, all utility companies/attachers should share in the responsibility of proper vegetation management. The Authority will further review the costs and responsibilities of vegetation management by the pole owners and attachers in a separate proceeding.

Conn. Gen. Stat. §16-234 and the changes ordered to line clearance standards for vegetation management within this Decision provide a fair balance between customer concerns, costs, safety, infrastructure reliability and faster restoration of service due to major storms.

B. ORDERS

For the following Orders, submit an original of the required documentation to the Executive Secretary, 10 Franklin Square, New Britain, Connecticut 06051, and file an electronic version through the PURA’s website at www.ct.gov/pura. Submissions filed in compliance with PURA Orders must be identified by all three of the following: Docket Number, Title and Order Number.

1. No later than July 11, 2014, the EDCs shall incorporate the EDCs’ proposed standards, as amended by the Authority, into their respective annual Maintenance Plans and only file the changes made to its current Maintenance Plan with the Authority.
2. No later than July 30, 2014, each EDC shall provide to the Authority an explanation of how it will record and track objections to its respective vegetation management activity and all follow-up actions it will take with the property owner.

3. No later than July 30, 2014, each utility shall provide proof to the Authority that it has informed their respective customers of its electronic mail account and its purpose to receive objections, requests for modification, inquiries or complaints related to its VMP.

4. No later than July 30, 2014, CL&P shall provide a status report on the UCONN Stormwise study of the value of the wood from removed trees and large limbs and file the results of the study to the Authority when it is completed.

5. No later than August 4, 2014, each EDC shall submit to the Authority an example of its notice to their respective customers and property owners by email, fax, first class mail and certified mail with return receipt to perform any vegetation management activity.

6. No later than September 2, 2014, each utility shall provide proof to the Authority that it has established and is operating their respective electronic mail account to receive objections, requests for modification, inquiries or complaints related to its vegetation management program.

7. No later than September 2, 2014 Verizon and CL&P shall report on the status of their discussions to update their respective Agreements regarding vegetation management plan’s cost sharing purposes and submit any renegotiated agreement to the Authority for its approval.

8. No later than December 1, 2014, each EDC shall provide proof to the Authority that they have included the information required by P.A. 14-151 in their respective notices for vegetation management activities.

9. No later than December 1, 2014, the EDCs shall initiate discussions with Frontier/SNET regarding the update to their Agreements for vegetation management plan’s cost sharing purposes and inform the Authority of such.

10. No later than 15 business days following the completion of its investigation into Ms. Bradford’s complaint, CL&P shall report to the Authority the results of the investigation and CL&P’s follow-up actions.

11. The EDCs shall include the information listed in Section II.C. in their annual VMP.
## V. APPENDICES

### APPENDIX A - SERVICE LIST

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<th>Service List for Docket # or Category: 12-01-10</th>
<th>P = Party</th>
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| kim.barbieri@torringtonct.org | | PC |

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| bbiddolli@gbrcnet.org | | |

Prepared by: Denise A. Kerr  
Date: April 17, 2014
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Prepared by: Denise A. Kerr  Date: April 17, 2014
Appendix B – Public Act No. 13-198

Public Act No. 13-298

An act concerning implementation of Connecticut’s comprehensive energy strategy and various revisions to the energy statutes.

Sec. 60. Section 16-234 of the general statutes is repealed and the following is substituted in lieu thereof (Effective July 1, 2013):

[No telegraph, telephone or electric light company or association, nor any company or association engaged in distributing electricity by wires or similar conductors or in using an electric wire or conductor for any purpose, shall exercise any powers which may have been conferred upon it to change the location of, or to erect or place, wires, conductors, fixtures, structures or apparatus of any kind over, on or under any highway or public ground, without the consent of the adjoining proprietors, or, if such company or association is unable to obtain such consent, without the approval of the Public Utilities Regulatory Authority, which shall be given only after a hearing upon notice to such proprietors; or to cut or trim any tree on or overhanging any highway or public ground, without the consent of the owner thereof, or, if such company or association is unable to obtain such consent, without the approval of the tree warden or the consent of the authority, which consent shall be given only after a hearing upon notice to such owner; but the authority may, if it finds that public convenience and necessity require, authorize the changing of the location of, or the erection or placing of, such wires, conductors, fixtures, structures or apparatus over, on or under such highway or public ground; and the tree warden in any town or the authority may, if he or it finds that public convenience and necessity require, authorize the cutting and trimming and the keeping trimmed of any brush or tree in such town on or overhanging such highway or public ground, which action shall be taken only after notice and hearing as aforesaid, which hearing shall be held within a reasonable time after the application therefor.]

(a) As used in this section:

(1) "Utility" means a telephone, telecommunications, electric or electric distribution company, each as defined in section 16-1, as amended by this act;

(2) "Utility protection zone" means any rectangular area extending horizontally for a distance of eight feet from any outermost electrical conductor or wire installed from pole to pole and vertically from the ground to the sky;

(3) "Hazardous tree" means any tree or part of a tree that is (A) dead, (B) extensively decayed, or (C) structurally weak, which, if it falls, would endanger utility infrastructure, facilities or equipment;

(4) "Vegetation management" means pruning or removal of trees, shrubs or other vegetation that pose a risk to the reliability of the utility infrastructure, and the
retention of trees and shrubs that are compatible with the utility infrastructure. Until such time as the Department of Energy and Environmental Protection issues standards for identifying such compatible trees and shrubs, the standards and identification of such compatible trees and shrubs shall be as set forth in the 2012 final report of the State Vegetation Management Task Force; and

(5) "Pruning" means the selective removal of plant parts to meet specific goals and objectives, when performed according to current professional tree care standards.

(b) A utility may perform vegetation management within the utility protection zone to secure the reliability of utility services by protecting overhead wires, poles, conductors or other utility infrastructure from trees and shrubs, parts of trees and shrubs or other vegetation located within the utility protection zone.

(c) (1) In conducting vegetation management, no utility shall prune or remove any tree or shrub within the utility protection zone, or on or overhanging any highway or public ground, without delivering notice to the abutting property owner. Notice shall be considered delivered when it is (A) mailed to the abutting property owner via first class mail, (B) delivered, in writing, at the location of the abutting property, or (C) simultaneously conveyed verbally and provided in writing to the abutting property owner. A utility shall deliver such notice to the abutting property owner if (i) pursuant to subparagraph (A) or (B) of this subdivision, at least fifteen business days before the starting date of any such pruning or removal, and (ii) pursuant to subparagraph (C) of this subdivision, at any time before any such pruning or removal, provided no utility may start such pruning or removal unless (I) the objection period pursuant to subdivision (2) of this subsection has been met, or (II) such property owner affirmatively waives, in writing, the right to object.

(2) The notice shall indicate that (A) objection to pruning or removal shall be filed in writing with the utility and either the tree warden of the municipality or the Commissioner of Transportation, as appropriate, not later than ten business days after delivery of the notice, and (B) the objection may include a request for consultation with the tree warden or the Commissioner of Transportation, as appropriate.

(3) If no objection is filed by the abutting property owner in accordance with subdivision (2) of this subsection, the utility may prune or remove the trees or shrubs for which notice of pruning or removal has been delivered.

(4) If the abutting property owner files an objection pursuant to subdivision (2) of this subsection, the tree warden of the municipality or the Commissioner of Transportation, as appropriate, shall issue a written decision as to the disposition of the tree or shrub not later than ten business days after the filing date of such objection. This decision shall not be issued before a consultation with the abutting property owner if such a consultation has been requested. The abutting property owner or the utility may appeal the tree warden's decision to the Public Utilities Regulatory Authority within ten business days after the tree warden's decision. The authority shall hold a hearing within sixty business days of receipt of the abutting property owner's or utility's written appeal of the tree warden's decision and shall provide notice of such hearing to the abutting property owner, the tree warden and the utility. The authority may authorize the
pruning or removal of any tree or shrub whose pruning or removal has been at issue in the hearing if it finds that public convenience and necessity require such action.

(5) When an objection has been filed pursuant to subdivision (2) of this subsection, no tree or shrub subject to the objection shall be pruned or removed until a final decision has been reached pursuant to subdivision (4) of this subsection.

(d) No utility shall be required to provide notice pursuant to subsection (c) of this section if the tree warden of the municipality or the Commissioner of Transportation, as appropriate, authorizes, in writing, pruning or removal by the utility of a hazardous tree within the utility protection zone or on or overhanging any public highway or public ground. Nothing in this subsection shall be construed to require a utility to prune or remove a tree.

(e) No utility shall be required to obtain a permit pursuant to subsection (f) of section 23-65 or provide notice under subsection (c) of this section to prune or remove a tree, as necessary, if any part of a tree is in direct contact with an energized electrical conductor or has visible signs of burning. Nothing in this subsection shall be construed to require a utility to prune or remove a tree.

(f) No utility shall exercise any powers which may have been conferred upon it to change the location of, or to erect or place, wires, conductors, fixtures, structures or apparatus of any kind over, on or under any highway or public ground, without the consent of the adjoining proprietors or, if such company is unable to obtain such consent, without the approval of the Public Utilities Regulatory Authority, which shall be given only after a hearing upon notice to such proprietors. The authority may, if it finds that public convenience and necessity require, authorize the changing of the location of, or the erection or placing of, such wires, conductors, fixtures, structures or apparatus over, on or under such highway or public ground.
AN ACT CONCERNING TREE TRIMMING.

Be it enacted by the Senate and House of Representatives in General Assembly convened:
1 Section 1. Subsection (c) of section 16-32h of the general statutes is
2 repealed and the following is substituted in lieu thereof (Effective from
3 passage):
4 (c) The authority shall, in the docket initiated pursuant to subsection
5 (b) of this section, review:
6 (1) Each such utility's current practices concerning service
7 restoration after an emergency. Such review shall include, but not be
8 limited to, an analysis of each such utility's (A) estimates concerning
9 potential damage and service outages prior to any emergency, (B)
10 damage and service outage assessments after any emergency, (C)
11 restoration management after any emergency, including access to
12 alternate restoration resources via regional and reciprocal aid
13 contracts, (D) planning for at-risk and vulnerable customers, (E)
14 policies concerning communication with state and local officials and
15 customers, including individual customer restoration estimates and
16 the timeliness and usefulness of such estimates, and (F) need for
17 mutual assistance during any emergency;
18 (2) The adequacy of each such utility's infrastructure, facilities and
19 equipment, which shall include, but not be limited to, an analysis of
20 (A) whether such utility is following standard industry practice
21 concerning operation and maintenance of such infrastructure, facilities
22 and equipment, and (B) whether such utility had access to adequate
23 replacement equipment for such infrastructure, facilities and
24 equipment during the course of such emergency;
25 (3) Coordination efforts between each electric distribution company
26 and any telecommunications company, community antenna television
27 company, holder of a certificate of cable franchise authority or certified
28 competitive video service provider, as those terms are defined in
29 section 16-1, including coordinated planning before any emergency;
30 (4) Tree trimming policies of each electric distribution company and
31 shall determine (A) the amount spent by each electric distribution
32 company for tree trimming in each year since such company's most
33 recent rate case, (B) each such company's system average interruption
34 duration index, as described in section 16-245y, caused by falling trees
35 and limbs, (C) the impact of expanding the area adjacent to
36 distribution lines for tree trimming, including an analysis of the
37 benefits and the costs of such expansion to ratepayers and the
38 likelihood that such expansion would decrease damage to
39 infrastructure, facilities and equipment used to distribute electricity
40 and decrease service outage frequency or duration, (D) the percentage
41 of service outages during Tropical Storm Irene and the October, 2011
42 snowstorm caused by trees and limbs outside the current trim area
43 based on an analysis of the quantity and effectiveness of prior tree
44 trimming, and (E) the standards appropriate for road-side tree care in
the state, vegetation management practices in utility rights-of-way, right tree-right place standards, and any other tree maintenance standard recommended by the State Vegetation Management Task Force established by the Department of Energy and Environmental Protection; [and]

50 (5) The use of mediation in resolving objections to proposed activities relating to vegetation management, as defined in section 16-234, as amended by this act, and the circumstances in which stump grinding may be performed within the utility protection zone, as defined in section 16-234, as amended by this act, provided, the utility, as defined in section 16-234, as amended by this act, shall recover all reasonable incremental costs incurred by such utility pursuant to the directives of the authority, as established pursuant to this subdivision, through the non-bypassable federally mandated congestion charge, as defined in subsection (a) of section 16-1; and

60 (5)(6) Any other policy, practice or information that the authority determines is relevant to a review of each such utility's ability to ensure the reliability of such utility's services in an emergency and to prevent, minimize and restore any long-term service outages or disruptions caused by such emergency.

Sec. 2. (NEW) (Effective from passage) On and after the effective date of this section, the Department of Energy and Environmental Protection shall review the vegetation management practices of each electric distribution company. Not later than one year after the final decision has been issued by the Public Utilities Regulatory Authority for the docket described in subsection (c) of section 16-32h of the general statutes, as amended by this act, and every two years thereafter, the authority shall submit a report, in accordance with the provisions of section 11-4a of the general statutes, to the joint standing committee of the General Assembly having cognizance of matters relating to energy. Such report shall include a review of the vegetation management practices of each electric distribution company.

Sec. 3. Section 16-234 of the 2014 supplement to the general statutes is repealed and the following is substituted in lieu thereof (Effective from passage):

80 (a) As used in this section:

81 (1) "Utility" means a telephone, telecommunications, electric or electric distribution company, each as defined in section 16-1;

82 (2) "Utility protection zone" means any rectangular area extending horizontally for a distance of eight feet from any outermost electrical conductor or wire installed from pole to pole and vertically from the ground to the sky;

83 (3) "Hazardous tree" means any tree or part of a tree that is (A) dead, (B) extensively decayed, or (C) structurally weak, which, if it falls, would endanger utility infrastructure, facilities or equipment;

84 (4) "Vegetation management" means the retention of trees and shrubs that are compatible with the utility infrastructure and the pruning or removal of trees, shrubs or other vegetation that pose a risk to the reliability of the utility infrastructure. [and the retention of trees
94 and shrubs that are compatible with the utility infrastructure.] Until 95 such time as the Department of Energy and Environmental Protection
issues standards for identifying such compatible trees and shrubs, the standards and identification of such compatible trees and shrubs shall be as set forth in the 2012 final report of the State Vegetation Management Task Force; [and]

(5) "Pruning" means the selective removal of plant parts to meet specific utility infrastructure reliability goals and objectives, when performed according to current professional tree care standards [1] and in a manner that retains the structural integrity and health of the vegetation;

(6) "Abutting property owner" means the owner of the property abutting or adjacent to that portion of a public road, public highway or public grounds where the tree or shrub that the utility proposes to remove or prune is located; and

(7) "Private property owner" means the owner of the property where a tree or shrub the utility proposes to remove or prune is located, which may include municipally owned land.

(b) A utility may perform vegetation management within the utility protection zone, as necessary, to secure the reliability of utility services. [by protecting overhead wires, poles, conductors or other utility infrastructure from trees and shrubs, parts of trees and shrubs or other vegetation located within the utility protection zone.]

(c) (1) In conducting vegetation management, no utility shall prune or remove any tree or shrub within the utility protection zone, or on or overhanging any public road, public highway or public ground, without delivering notice of the proposed vegetation management to the abutting property owner or private property owner. Such notice shall include the option for the abutting property owner or private property owner to consent, in writing, to such proposed pruning or removal, object to such proposed pruning or removal or modify such proposed pruning or removal. The notice shall include instructions regarding how the recipient may object in accordance with subdivision (3) of this subsection. Such notice shall also include a statement that if a person objects to the proposed pruning or removal, and such tree falls on any utility infrastructure, such person shall not be billed by the utility for any resulting damage. If requested by an owner of private property, the utility, municipality or the Commissioner of Transportation, as appropriate, shall provide such owner with information regarding whether a tree or shrub to be pruned or removed is in the public right-of-way or whether such tree or shrub is on such owner's private property.

(2) Notice shall be considered delivered when it is (A) mailed to the abutting property owner or private property owner via first class mail, electronic mail or text message, (B) delivered, in writing, at the location of the abutting property or private property owner, or (C) simultaneously conveyed verbally and provided in writing to the abutting property owner or private property owner. A utility shall deliver such notice to the abutting property owner [if (i) pursuant to subparagraph (A) or (B) of this subdivision,] or private property owner at least fifteen business days before the starting date of any such
145 pruning or removal. I, and (ii) pursuant to subparagraph (C) of this 146 subdivision, at any time before any such pruning or removal, provided
147 no utility may start such pruning or removal unless (I) the objection
148 period pursuant to subdivision (2) of this subsection has been met, or
149 (II) such property owner affirmatively waives, in writing, the right to
150 object.
151 [(2)] (3) The notice shall indicate that (A) objection to pruning or
152 removal shall be filed, in writing, with the utility and either the tree
153 warden of the municipality or the Commissioner of Transportation, as
154 appropriate, not later than ten business days after delivery of the
155 notice, and (B) the objection may include a request for consultation
156 with the tree warden or the Commissioner of Transportation, as
157 appropriate. For purposes of this section, an abutting property owner
158 may file an objection or request for modification by (i) sending a
159 written objection or request for modification to the utility or tree
160 warden at the address for each specified on the notice, provided if the
161 written objection is mailed, it shall be deemed received on the date it is
162 postmarked, or (ii) sending by electronic mail an objection or request
163 for modification to the dedicated electronic mail address maintained
164 by the utility as specified on the notice.
165 (4) The utility shall not prune or remove any tree or shrub that is
166 outside of the public right-of-way unless it receives written affirmative
167 consent from the private property owner to whom notice is required in
168 accordance with subdivision (2) of this subsection.
169 [(3)] (5) If no objection is filed by the abutting property owner in
170 accordance with subdivision [(2)] (3) of this subsection, the utility may
171 prune or remove the trees or shrubs for which notice of pruning or
172 removal has been delivered, provided the utility has also received a
173 permit as required by subsection (f) of section 23-65, as amended by
174 this act. Nothing in this chapter shall be construed to limit the power
175 and authority of a tree warden as set forth in subsection (f) of section
176 23-65.
177 [(4)] (6) If the abutting property owner files an objection or request
178 for modification pursuant to subdivision [(2)] (3) of this subsection, or
179 if the utility does not accept the modification to the original notice, as
180 described in subdivision (1) of this subsection, the tree warden of the
181 municipality or the Commissioner of Transportation, as appropriate,
182 shall issue a written decision as to the disposition of the tree or shrub
183 not later than ten business days after the filing date of such objection.
184 This decision shall not be issued before a consultation with the
185 abutting property owner if such a consultation has been requested. The
186 abutting property owner or the utility may appeal the tree warden's
187 decision to the Public Utilities Regulatory Authority within ten
188 business days after the tree warden's decision. [The]
189 (A) Prior to the final decision in the docket described in subsection
190 (c) of section 16-32h, as amended by this act, the authority shall hold a
191 hearing within sixty [business] calendar days of receipt of the abutting
192 property owner's or utility's written appeal of the tree warden's
193 decision and shall provide notice of such hearing to the abutting
194 property owner, the tree warden or the Commissioner of
195 Transportation, as appropriate, and the utility. The authority may
authorize the pruning or removal of any tree or shrub whose pruning
or removal has been at issue in the hearing if it finds that public
convenience and necessity requires such action. The burden of proving that public convenience and necessity requires such action shall be on the utility.

(B) On and after the effective date of the final decision issued in the docket described in subsection (c) of section 16-32h, as amended by this act, the entity designated by the authority, as determined by such docket, shall hold a mediation session not later than thirty calendar days after receipt of the abutting property owner's or utility's appeal of the tree warden's or the Commissioner of Transportation's decision and shall provide notice of such mediation session to the abutting property owner, the tree warden or the Commissioner of Transportation, as appropriate, and the utility, provided the abutting property owner may opt not to utilize such mediation session and proceed to the hearing described in this subparagraph. In the event that the appeal is not settled by mediation, or the abutting owner elects not to use such mediation session, the authority shall hold a hearing not later than thirty calendar days after the conclusion of the mediation session, or within sixty calendar days of the receipt of the abutting property owner's written appeal if there is no mediation session, and shall provide notice of such hearing to the abutting property owner, the tree warden, or the Commissioner of Transportation, as appropriate, and the utility. The authority may authorize the pruning, removal or stump grinding of any tree or shrub whose pruning or removal has been at issue in the hearing if it finds that public convenience and necessity requires such action. The burden of proving that public convenience and necessity requires such action shall be on the utility.

(5) When an objection or request for modification has been filed pursuant to subdivision (2) (3) of this subsection, no tree or shrub subject to the objection or request for modification shall be pruned or removed until a final decision has been reached pursuant to subdivision (4) (6) of this subsection.

(d) No utility shall be required to provide notice pursuant to subsection (c) of this section shall not apply if the tree warden of the municipality or the Commissioner of Transportation, as appropriate, authorizes, in writing, pruning or removal by the utility of a hazardous tree within the utility protection zone or on or overhanging any public highway or public ground. If the hazardous tree is outside of the public right-of-way, the utility shall make a reasonable effort to notify the property owner of the proposed pruning or removal at least three days prior to performing such pruning or removal. Nothing in this subsection shall be construed to require a utility to prune or remove a tree.

(e) No utility shall be required to obtain a permit pursuant to subsection (f) of section 23-65 or provide notice under subsection (c) of this section to prune or remove a tree, as necessary, if any part of a tree in direct contact with an energized electrical conductor or has visible signs of burning. Nothing in this subsection shall be construed to require a utility to prune or remove a tree.
247 (f) No utility shall exercise any powers which may have been
248 conferred upon it to change the location of, or to erect or place, wires,
249 conductors, fixtures, structures or apparatus of any kind over, on or
250 under any public road, public highway or public ground, without the
251 consent of the adjoining proprietors or, if such company is unable to
252 obtain such consent, without the approval of the Public Utilities
253 Regulatory Authority, which shall be given only after a hearing upon
254 notice to such proprietors. The authority may, if it finds that public
255 convenience and necessity require, authorize the changing of the
256 location of, or the erection or placing of, such wires, conductors,
257 fixtures, structures or apparatus over, on or under such public road or
258 highway or public ground.
259 (g) Each utility shall operate an electronic mail account to receive
260 objections, requests for modification, inquiries or complaints pursuant
261 to subsections (a) to (f), inclusive, of this section.
262 Sec. 4. Subsection (f) of section 23-65 of the general statutes is
263 repealed and the following is substituted in lieu thereof (Effective from
264 passage):
265 (f) Any person, firm or corporation, other than a tree warden or his
266 deputy, who desires the cutting or removal, in whole or in part, of any
267 tree or shrub or part thereof within the limits of any public road or
268 grounds, may apply in writing to the town tree warden, the borough
269 tree warden or the Commissioner of Transportation or other authority
270 having jurisdiction thereof for a permit so to do. Upon receipt of such
271 permit, but not before, [he] the applicant may proceed with such
272 cutting or removal, provided doing so is also consistent with section
273 16-234, as amended by this act, if applicable. Before granting or
274 denying such permit, such authority may hold a public hearing as
275 provided in section 23-59, [l, and when] When the applicant is a public
276 utility corporation, the party aggrieved by such decision may, within
277 ten days, appeal therefrom to the Public Utilities Regulatory Authority,
278 which shall have the power to review, confirm, change or set aside the
279 decision appealed from and its decision shall be final. The burden of
280 proving that public convenience and necessity requires the proposed
281 cutting or removal shall be on the utility. This appeals process shall be
282 in addition to the powers granted to [it] the Public Utilities Regulatory
283 Authority under section 16-234, provided, if an application for such
284 permit has been made to either a tree warden or the Commissioner of
285 Transportation or other authority and denied by him, an application
286 for a permit for the same relief shall not be made to any other such
287 authority. Upon any approval of such a permit by the Commissioner
288 of Transportation, he shall notify the tree warden for the town in
289 which the tree is located. Upon any approval of such a permit by the
290 Commissioner of Transportation, the permittee shall notify the tree
291 warden for the town in which the tree is located prior to cutting any
292 such tree.
293 This act shall take effect as follows and shall amend the following
294 sections:
Section 1 from passage 16-32h(c)
Sec. 2 from passage New section
Sec. 3 from passage 16-234
APPENDIX D – UTILITY LINE CLEARANCE STANDARDS

Utility Line Clearance Standards (proposed jointly by CL&P and UI)

The following standards shall be considered the minimum requirements for each electric distribution company’s vegetation management plan. Line clearance shall be performed to protect the company’s primary electric lines and equipment during normal and severe weather.

Vegetation Management Plan

By November 15 of each year, the company shall file an annual Vegetation Management plan that includes but shall not be limited to the following:

1. Work scope and budget details
   a. Roadside miles scheduled, backbone and lateral
   b. Right-of-Way miles, brush control and side pruning
   c. Risk tree removal
   d. Vine control
   e. Traffic control
   f. Customer request tree work
   g. Mid-Cycle
   h. Emergency restoration, minor storm
   i. Other

2. Tree and brush work specification

3. Line clearance organization

4. Property owner notification and consent procedures

5. The planned maintenance within each town within the company’s service territory

Clearance Requirements

1. Routine maintenance tree and brush work (tree pruning) shall be performed on a 4-year cycle.
   a. All roadside and off-road primary voltage lines shall be cleared at least once every 4 years.

2. The utility clearance zone shall be the area 8 feet to the side of all primary conductors from the ground to the sky.
   a. Enhanced Clearance shall be performed to achieve the following clearances on all circuit backbone and lateral conductors selected for enhanced tree work:
i. Remove all tall growing tree species below within the clearance zone
ii. Remove all overhanging limbs within the clearance zone

b. Scheduled Maintenance Clearance shall be performed to achieve the following clearance around all primary voltage conductors not selected for enhanced tree work:
   i. 10 feet below within the clearance zone
   ii. 15 feet overhead within the clearance zone

3. Remove hazard trees within the clearance zone
4. Each tree shall be evaluated at the time that it is pruned. The tree crew shall consider tree species, condition, growth rate and location when performing line clearance.
5. Clearance shall be performed in accordance with the following tree care industry standards:
   a. ANSI Z133.1
   b. OSHA 29 CFR 1910.269
   c. ANSI A300 Part 1: Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, Pruning
   d. Best Management Practices, Utility Pruning of Trees
DOCKET NO. 12-01-10  PURA INVESTIGATION INTO THE TREE TRIMMING PRACTICES OF CONNECTICUT’S UTILITY COMPANIES

This Decision is adopted by the following Commissioners:

John W. Betkoski, III

Arthur H. House

Michael A. Caron

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Nicholas E. Neeley
Acting Executive Secretary
Public Utilities Regulatory Authority

June 25, 2014