STATE OF CONNECTICUT
PUBLIC UTILITIES REGULATORY AUTHORITY

PURA INVESTIGATION INTO THE TREE TRIMMING PRACTICES OF CONNECTICUT'S UTILITY COMPANIES	**:**	**DOCKET NO. 12-01-10**
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	:	**PUBLIC HEARING JULY 31, 2013**

STATEMENT ON BEHALF OF THE GARDEN CLUB OF NEW HAVEN

By

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On behalf of the Garden Club of New Haven, I welcome this opportunity to address the issues before PURA regarding utility tree trimming, in light of the recent enactment of Section 60 of Public Act 13- 298. Section 60 substantially amends Section 16-234 of the general statutes. The Garden Club played a role in drafting this legislation, and we also have submitted three customer comments during the course of this docket (filed 3/20/2012, 12/17/2012 and 2/13/2013).

Section 60(c) provides greater clarity with regard to the notice requirements to property owners whose property abuts the area in which utility tree and shrub pruning and removal is proposed. If a property owner objects, it specifies the decision-making process. It also protects the tree or shrub in question from pruning or removal until a final decision on the objection has been made. Subsection (a) of Section 60 establishes definitional guidelines for pruning and removal of trees and shrubs to protect the reliability of the utility infrastructure. For ease of reference, Section 60 is included as Attachment A to this statement.

I address three issues: cost effective tree pruning and removal; implementation of the notice requirements; and training of contract work crews.

(1) <u>Cost effective tree pruning and removal for utility reliability, especially during major storms.</u>

Section 60's definition of a utility protection zone in subsection (a)(2) establishes the boundaries within which utilities may conduct vegetation management, as defined in subsection (a)(4), to protect utility infrastructure. Utilities also may conduct vegetation management on trees "on or overhanging any highway or public ground" on the opposite side of the road from the utility protection zone. Compatible trees and shrubs must be retained and pruning is defined as removing plant parts in accordance with professional tree care standards. Neither the definition of the utility protection zone nor the definition of

vegetation management mandates that a particular approach to vegetation management to protect the reliability of the utility infrastructure be used.

Thus, the new law leaves unanswered the main question in this docket -- what is the cost effective method of vegetation management for power reliability, especially during major storms?

Both the Connecticut Light and Power Company (CL&P) and United Illuminating (UI) appear to consider Enhanced Tree Trimming (ETT) to be the best method to use to ensure power reliability. It has been used by CL&P for many years, but not on all of its distribution lines. In its application to PURA in Docket No. 13-01-19, UI proposes to use ETT on all of its distribution lines. In both cases, ETT is to be used on roadside trees in the area now defined by Section 60 as a "utility protection zone," the area surrounding utility infrastructure .

Once used, ETT has an irreversible impact on tree structure, significantly reducing the tree canopy, and possibly creating hazardous trees because of the aggressive pruning. In addition, ETT can result in removal of healthy trees that cannot be pruned to clearance specifications. Unless a more rigorous scientific analysis of the effectiveness and direct and external costs of ETT demonstrates its cost-effectiveness on a large scale, we oppose expansion of ETT by CL&P and widespread adoption of ETT by UI. Such an analysis should include developing criteria to determine in what circumstances ETT would be most cost-effective and should be used.

The proposed use of ETT on all of UI's distribution lines is of special concern to the Garden Club of New Haven and its members who live in the City of New Haven and surrounding suburbs. In our opinion, UI has done an excellent job of achieving compatibility between the utility infrastructure and roadside trees by using directional pruning and tree wire and otherwise maintaining the strength of the infrastructure. Loss of the resulting tree canopy due to ETT would be especially harmful in the more densely populated areas, where roadside trees are of even greater importance, and would have a detrimental impact on the quality of life in New Haven and surrounding cities and towns and on their character.

We first address the effectiveness of ETT, and then its cost.

<u>Effectiveness:</u>

A determination of the effectiveness of ETT in protecting power reliability in major storms first requires a reliable, detailed data base from the major storms . Second, it requires that a rigorous analysis of the data be conducted that focuses on the causes of power outages, and compares outages, including the length of those outages, on distribution lines with and without ETT in similar circumstances across major variables.

Understandably, there appears to have been little attention paid to detailed data collection as restoration efforts for the three storms took place, and what data there is does not provide the kind of detail that would provide definitive answers to questions about effectiveness. This conclusion and the following discussion are based on review of the State Vegetaton Management Task Force (SVMTF) Final report submitted in this docket and the accompanying questions letter from the chair of the SVMTF indicating the absence of hard data, as well as a review of submissions to related dockets before PURA, including Docket Nos. 11-09-09; 12-06-09; 12-09-13; and 13-01-19.

There is no doubt that tree and utility infrastructure interactions were a significant cause of the power outages during the major storms, but the data do not indicate whether the trees that fell were hazardous, whether they had been pruned properly and if so, whether they had been pruned by ETT or a less aggressive method, and when in the trim cyle they were pruned. CL&P credits ETT with reducing power outages more than normal tree trimming by comparing areas where CL&P used ETT to areas where it did not, but the ETT category includes removal of hazardous trees, and that removal could explain much of the reduction. It is impossible to tell.

There also does not seem to be any evidence that UI, which had not used ETT, suffered a greater percentage of power outages in its customer base during the three storms due to falling trees or tree branches than did CL&P, even though CL&P had used ETT for many years prior to the three storms. Obviously, geographical location, differences in the character of the communities served, differences in the characteristics of the three different storms and where they hit hardest make comparison difficult, but the absence of significantly different results should at least raise doubt about whether ETT is the best approach to ensuring power reliability. If appropriate data from comparable areas within each utility's service area could be obtained to make that comparison, it would be a useful starting point for evaluating effectiveness.

In addition, to determine whether ETT within the utility protection zone would be effective to prevent power outages in major storms, data is needed to indicate to what extent power outages during the three major storms were caused by trees and branches that were located within that zone. Observers of storm damage reported at SVMTF meetings that 50 to 70% of power outages were caused by trees falling from outside the area where utility infrastructure is located. Because of the greater distance from which they would fall, such trees are likely to do much greater damage to the utility infrastructure than trees within the utility protection zone, as a matter of simple physics. They are also more likely to take greater time to clear.

In short, on the basis of available data and its analysis, one cannot be confident about the accuracy of predictions that expansion of ETT by CL&P and adoption of ETT for all its distribution lines by UI would significantly reduce power

outages during major storms. There is no solid evidentiary basis for UI's prediction of a 25 to 50% reduction. Because of this uncertainty, it is especially important that all the costs of ETT be carefully considered.

Costs

First, the direct costs of using ETT, documented in the UI application, are high, and those high costs must be justified by a much higher rate of reduction of power outages than can be achieved by using less costly methods to achieve power reliability. Until that justification can be made, we consider directional pruning, use of tree wire, upgrading to strengthen other infrastructure and a greater focus on removal of hazardous trees both within and outside the utility protection zone to be most cost-effective. Hazardous trees are defined in Section 60 (a) (3) as those trees and branches that are dead, extensively decayed or structurally weak and which, if they fall, will endanger utility infrastructure, facilities or equipment. Subsections (d) and (e) eliminate the notice requirement for such hazardous trees and branches, and thus the costs of notice. Although it is true that trees that appeared healthy also fell during the three major storms, removal of hazardous trees would certainly decrease power outages, and their removal would not impose significant external costs, discussed below.

Loss of tree canopy, extremely lopsided pruning and elimination of healthy trees resulting from ETT impose external costs on property owners and their communities because of the elimination or reduction of the many benefits of healthy roadside trees, including:

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(1) Increased cooling and heating costs, including reduction in the mitigation of heat island effects in urban areas
(2) Increased air pollution
(3) Negative health effects
(4) Increased storm water runoff
(5) Decreased carbon dioxide reduction
(6) Negative impact on aesthetics, which reduces property values

The benefits of roadside trees are discussed in detail in the State Vegetation Management Task Force report at pp. 13-18. The loss or reduction of these benefits of roadside trees are costs that are likely to be especially severe in more densely populated cities, towns and neighborhoods, where roadside trees are a bigger component of the tree population.

ETT may prove to be the best solution in some places, but the numerous benefits of a tree-lined street and a robust tree canopy suggest to us that healthy trees should not be removed or severely pruned even though they do not meet "right tree/right place" standards. Over time, as trees die and are replaced, Connecticut will move to a roadside forest that is predominantly made up of "right tree/right place" trees that require little or no pruning . The SVMTF final report

envisioned a long transition to a "right tree/right place" roadside forest, and Connecticut will benefit from following that policy.

(2) Implementation of the notice requirements.

Compliance by the utilities with the requirements of subsection (c) of Section 60 for notice to abutting property owners, a right to object, and a clear decision-making process is essential to public acceptance and understanding of the need for pruning and removal for power reliability. We expect that in almost all cases local resolution of any objection will occur.

However, a recent customer comment in this docket suggests that mailed notice does not always get delivered. To remedy this problem, PURA should require the utilities to insert a note in their bills notifying property owners that notices of utility tree pruning and removal will be sent during a specified period. Towns could also be encouraged by the utilities to communicate that information to their residents. Property owners who don't get a notice due to postal error can then inquire of the utility whether any work is planned abutting their property.

(3) Training and monitoring of contractor work crews

Trust in the utilities' tree pruning and removal work is also important to public acceptance of tree pruning and removal. That trust can be damaged in a number of ways by poorly trained or monitored work crews that: (1) fail to comply with an agreement or decision that a tree should not be removed or that it should be pruned in a specified manner; (2) fail to prune in accordance with professional tree care standards, now required by the definition of pruning in subsection (a)(5); (3) remove trees and shrubs that are compatible with the utility infrastructure and pose no risk to its reliability; or (4) fail to remove or prune trees that pose a risk to that infrastructure, but remove compatible trees. When trust is lost, the affected property owner, as well as his or her neighbors and friends, will be less willing to accept necessary pruning or removal in the future. In addition, improper pruning can create hazardous trees, increasing future costs.

At present it appears that the utilities leave it to the contractor to train the work crews and accept without verification that the work crews are properly trained. Whether or not that is the case, the utlities must do more to ensure that work crews are *in fact* properly trained. At a minimum, PURA should require utilities to have a management plan that ensures that contractors are adequately training work crews in legal requirements, including professional standards for pruning. The management plan must also include a process for ensuring that work crews are effectively monitored for compliance with applicable standards and that any agreement reached with a property owner or any decision made by a tree warden, DOT or PURA will be accurately followed.

Attachment A
Section 60 of Public Act 13-298

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.