MARY-MICHELLE HIRSCHOFF
SPOKESMAN ON TREES AND POWER, GARDEN CLUB OF NEW HAVEN

Mary-Michelle Hirschoff, Spokesman on Trees and Power for the Garden Club of New Haven, respectfully requests that the Public Utilities Regulatory Authority ("PURA") revise its revised draft decision issued in the above-captioned proceeding on May 30, 2014 ("Revised Draft Decision" or "RDD"), as described herein. Ms. Hirschoff requests oral argument in this case.

I. INTRODUCTION

PURA's mandate to review and determine "the standards appropriate for roadside 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," was enacted, along with other provisions, in Public Act 12-148, and codified as Subsection (c)(4)(E) of Section 16-32h, C.G.S. This mandate was incorporated into this Docket, 12-01-10, on November 1, 2012.
Section 60 of Public Act 13-268 (now codified as Section 16-234, 2014 Supplement) went into effect in July of 2013, prior to the issuance of the Draft Decision in this docket on November 19, 2013. Following the filing of Exceptions to the Draft Decision, and the subsequent hearings, technical meetings and site visits described in the Revised Draft Decision, Public Act 14-151 (formerly HB 5408) passed the House and the Senate on May 7, 2014 and is awaiting the Governor's signature.

Public Act 14-151 amended Section 16-234, 2014 Supplement, C.G.S., in significant respects, both in process and in standards for vegetation management. It also amended Section 16-32h, C.G.S. by adding a new Subsection (5) providing for review by PURA of mediation and of stump grinding; required review of electric distribution company ("EDC") vegetation management practices by the Department of Energy and Environmental Protection ("DEEP") and reports by PURA to the General Assembly about such practices; and amended Section 23-65(f), C.G.S. to provide that, on appeal to PURA from a tree warden's or DOT decision with regard to tree pruning or removal, the utility has the burden of proving that public convenience and necessity require the removal or pruning.

Any standards now adopted by PURA pursuant to Subsection (c)(4)(E) of Section 16-32h, C.G.S. must comply with Section 16-234 as amended by Public Act 13-298 and Public Act 14-151 and with other provisions of Public Act 14-151. PURA has no authority to authorize the utilities to engage in pruning or removal of trees that does not comply with those laws or to limit the ability of the utilities to comply with them. The following Exceptions address the extent to which the Revised Draft Decision fails to
comply with the relevant statutory provisions with regard to tree removal and pruning and suggest revisions that should be made to ensure compliance.

II. EXCEPTIONS

A. The Revised Draft Decision does not use the term "compatible trees" accurately.

As amended by Public Act 14-115, Section 16-234(a) defines "vegetation management" as

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. 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 [Emphasis added.]

Throughout the Revised Draft Decision the term "compatible tree" is used in a way that assumes that only those trees and shrubs identified in two lists within the State Vegetation Management Task Force Report ("SVMTF Report") section on Right Tree/Right Place are "compatible" trees to be retained in accordance with the statutory standard. For example, at page 18, the Revised Draft Decision states: "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. " Even more explicitly, at pp. 20-21, it states: "Compatible trees have a short height and will not grow into the trim area for the EDC lines."

In fact, the SVMTF Report did not so limit the trees that should be retained. In its Executive Summary Statewide Recommendations, at page 6, the SVMTF Report states as follows:

- The Right Tree, Right Place guidelines must be used for planting trees and shrubs in roadside forest areas where trees have either failed or have to be
removed. **It is important to note that large trees have an important place in the current and future roadside forest.** [Emphasis added.]

- Roadside Forests must be managed to become more storm resistant over time (decades) through a combination of tree pruning, removals and Right Tree, Right Place planting.
- Standards are essential to ensure tree removals are done based upon science-based professional training, shared methods of hazard assessment, and planning for tree replacement.

Had the SVMTF Report considered all large tall non-hazardous trees not to be compatible with the utility infrastructure, it would not have emphasized the importance of large trees to the "future roadside forest," tree pruning as well as removals over decades, and careful science-based assessment of whether a tree needs to be removed. This is a recognition that, with proper pruning, large tall trees can co-exist, i.e. be compatible, with the utility infrastructure.

In the introduction to the Right Place/Right Tree lists, at page 36 of the SVMTF Report, it states: "Over the next several decades, many of the larger trees in our maturing roadside forests will decline and will to need to be replaced." It further states, at page 39, "We are not advocating the wholesale removal of existing trees and replanting with only species on this list. Where low growing trees and shrubs are currently present, they should be favored in management operations." The two lists that follow the introduction are labeled: "Trees with Short Heights" (at page 40) and "Selected shrubs suitable for planting near utilities." These are lists for planting, now or when a declining tree must be removed, not lists to be used to determine whether a tree should be removed. Obviously, a tree or shrub on these lists and others with similar characteristics should be retained if already growing within the UPZ. They are necessarily "compatible trees," but they are not the only compatible trees. The lists do not, in fact use the term "compatible," and it
is inaccurate to use the lists to exclude large tall trees as compatible when proper pruning allows them to co-exist with the utility infrastructure.

In enacting the two public acts in 2013 and 2014, it would have been easy for the General Assembly to require that all large tall trees capable of growing too near to electrical utility infrastructure should be removed from the Utility Protection Zone ("UPZ"). It did not. Instead, as discussed below, the legislature has adopted statutory provisions that, in both process and the standards for pruning, ensure that large tall, non-hazardous trees that are compatible shall be retained.

**B. Rigid distance-based line clearance standards that lead to premature removal of large tall, non-hazardous trees within the Utility Protection Zone ("UPZ") conflict with Section 16-234 as amended.**

As the Comments submitted by the Connecticut Fund for the Environment ("CFE") in this docket on May 29 2014¹ explain, the amendments to Public Act 14-151 invalidate rigid line clearance standards, such as those included in the vegetation management plans submitted by both CL&P and UI. We concur with the CFE analysis, and offer further explanations of why the amendments to Section 16-234 and other provisions of Public Act 14-151 also necessarily lead to that conclusion.

As suggested by CFE, the amendment to the definition of Vegetation Management in Sec. 16-234 (a)(4), to emphasize retention of compatible trees and shrubs, is quite clearly a response to the widely expressed public opposition throughout the State to the removal of large tall, non-hazardous trees within the UPZ that appeared to be mandated by the original Draft Decision, and by PURA's authorization of Enhanced Tree Trimming, increasingly used by CL&P throughout the entire UPZ in much of its

---

¹ Presumably, PURA had no time to consider the comments before issuing its Revised Draft Decision on May 30, 2014.
territory and being used in pilot projects by UI and planned to be used beginning in June of 2014 for all of its electric distribution lines in its entire territory.

By adding the term "as necessary" to subsection (b) of Section 16-234, and deleting "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 area," Public Act 14-151 made clear that the focus should be on the utilities' doing only that pruning and removal that is required to secure the "reliability of utility services" and not on other objectives. Section 16-234 (b) now reads:

A utility may perform vegetation management within the utility protection zone, as necessary, to secure the reliability of utility services. [Emphasis added.]

Public Act 14-151's amendments to the definition of "Pruning" in Section 16-234 (a)(5) also add a focus on utility infrastructure reliability and a requirement that the pruning of vegetation not only comply with professional tree care standards, but be done "in a manner that retains the structural integrity and health of the vegetation."

A rigid line clearance standard, defined solely by a fixed distance from utility infrastructure, ignores the requirement that the pruning or removal at issue is necessary to the reliability of the utility infrastructure. It also precludes the use of professional pruning standards that retain the "structural integrity and health" of a tree or shrub. Rigid line clearance standards are in fact not favored by professional pruning standards. Best Management Practices, Utility Pruning of Trees, by Geoffrey R. Kempter, states, at page 11:
Pre-Established Clearing Limits
Many pruning specifications require a minimum clearance between tree branches and utility facilities. If used, such pre-established clearing limits should allow for variables such as:

- tree species characteristics
- expected growth rate
- natural tree structure
- expected reaction to pruning
- wood strength
- overall tree health
- length of time until next scheduled pruning
- type of facility (voltage, construction type, etc.)

Factors such as the presence of other trees, buildings, terrain, and other site features also contribute to the shape or growth patterns of trees and should be taken into account when obtaining clearances.

On page 12, the Best Practices manual states: "clearance distances should be recommended for individual species based on expected growth rates." Care must clearly be taken to ensure that the clearance distances between tree branches and utility facilities are reasonable. We do not oppose the use of minimum clearance distances as guides for planning by the utilities as long as they permit variation as described above and do not conflict with the requirements of Section 16-234.

The conclusion that Section 16-234, as amended, precludes the use of rigid line clearance standards, whether ETT or otherwise, to excessively and unnecessarily prune a tree so that it must be removed (as recommended by ANSI A300, Part 1, 6.1.4 if more than 25% of the foliage were removed) or to remove a tree solely due to its location within the UPZ, is reinforced by other provisions of Section 16-234, as amended, and its overall structure.
Public Act 14-151's amendments to subsections (c)(1) through (c)(7) made numerous changes to improve the process for notice of proposed pruning and removal of roadside trees, to clarify the process for objection by an abutting property owner and to add a right to request a modification to the proposed pruning or removal.² In any appeal pursuant to subsection (c)(6), the burden is placed on the utility to prove that “public convenience and necessity” requires the pruning or removal in dispute. Subsection (c)(6) also provides for mediation of disputes at the option of the abutting property owner.

All of these improvements to the process would be rendered virtually meaningless if PURA's standards permit utility vegetation management plans to use rigid line clearance requirements based on distance from the electrical conductors to mandate tree removal. This is because the only category of trees to which these processes would apply in practice are large tall, non-hazardous trees. Hazardous trees are defined in subsection (a)(3) of Section 16-234, as amended, as "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." No notice is provided to abutting homeowners for removal of a hazardous tree or pruning of a hazardous branch, provided that the tree warden or Commissioner of Transportation authorizes such removal. Right tree/ right place trees or shrubs do not threaten utility infrastructure reliability. Only minimal

² It also made clear that a utility cannot remove a tree that is within the UPZ, but not within the public right-of-way, without receiving affirmative written consent for removal from the private property owner, providing an exception for a hazardous tree, for which the utility must try to give three days notice before removal. Section 16-234, (c)(4) and (d) as amended by Public Act 14-115.
pruning, if any, would be required for such trees and shrubs, and thus the objection process is of no importance to such trees.

Rigid line clearance standards also undermine the authority of tree wardens, which is reaffirmed by Public Act 14-151, in the following amendment to subsection (c)(5) of Section 16-234 adding the following: "Nothing in this chapter shall be construed to limit the power and authority of a tree warden as set forth in subsection (f) of section 23-65."

If the standards for vegetation management adopted by PURA permit the application of rigid line clearance standards by a utility, PURA will have unfairly prejudged the outcome of any appeal regarding the only trees that could possibly be the subject of the appeal -- large tall, non-hazardous trees. This outcome would be dictated despite the fact that Public Act 14-151 places the burden of proving public convenience and necessity for removal or pruning on the utility.

C. PURA's Standards for Vegetation Management Must Be Rewritten to Comply with Public Act 14-151

We were encouraged by PURA's statement in its Introduction Summary that it "has attempted . . . 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. We also appreciate PURA's statement at page 16 of the Revised Draft Decision that it "expects the utility companies to use alternative solutions (other than outright removal of vegetation) within the UPZ whenever conditions permit." This statement suggests that PURA recognizes that rigid application of the EDC's line clearance requirements would not be in compliance with Section 16-234 as amended by Public Act 14-151.
However, the Revised Draft Decision still utilizes the rigid line clearance requirements of ETT and of scheduled maintenance as originally proposed by the utilities (page 17, RDD) and then makes exceptions to those requirements in paragraph 4, beginning on page 17. The continued use of the original EDC proposals as a starting point and the title "Line Clearance Requirements," especially since that term derives from those proposals, is confusing and misleading. It is also unnecessary. Subsection (c)(4)(E) of Section 16-32h, C.G.S. directs PURA to determine “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, [emphasis added].” It does not use the term "line clearance." Neither Section 16-32g nor the regulations adopted thereunder (Sec.16-32g-1) use the term "line clearance" in connection with the required annual submission of line maintenance plans by the EDCs, which must include "a program for the trimming of tree branches and limbs located in close proximity to overhead electric wires where such branches and limbs may cause damage to such electric wires." Section 16-234, as amended establishes a "Utility Protection Zone," not a Utility Clearance Zone. Standards or requirements established for utility pruning and removal within the UPZ should be labeled vegetation management standards and requirements, not clearance standards or requirements.

Accordingly, with the intention of helping you more easily revise the Revised Draft Decision, we respectfully suggest that the following standards and requirements, which modify those set forth in the RDD, be adopted by PURA for vegetation
management, in order to comply with Public Act 14-151. As appropriate, explanations will be provided in brackets [ ] following a suggested standard or requirement:

1. **Vegetation Management Standards and Requirements**

   The Authority will require each EDC to modify its Vegetation Management Plan ("VMP"), including elimination of line clearance requirements as proposed and currently in use, and, to comply with Sec. 16-234 as amended by Public Act 14-151, the EDCs shall act in accordance with the following standards:

   1. Routine vegetation management shall be performed on a four-year cycle. [The term "brush" is omitted as it is not defined in Sec. 16-234 as amended, and it is unclear what is meant by that term, which could include small volunteer right tree/right place trees that should be retained, not removed.] Vegetation management shall be performed on all roadside and off-road primary voltage lines at least once every four years.

   2. The UPZ is 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 ground to sky. [It is preferable to quote the exact statutory language, to avoid any misunderstanding.] Vegetation management may be performed in the UPZ, as necessary, to secure the reliability of utility services.

   3. Hazardous trees shall be removed within the UPZ with the written consent of the tree warden or Commissioner of Transportation; on private property within the UPZ, only after a reasonable effort to provide a three day notice to the private property owner; and on private property outside of the UPZ, only with the written affirmative consent of the private property owner. [The term "hazard tree" should not be used, since it is "hazardous trees" that are defined in Sec. 16-234.]

   4. Prior to providing notice to abutting property owners or private property owners of proposed pruning and removal of any tree or shrub in the UPZ, the utility shall submit a written application to and obtain a written permit from the tree warden or Commissioner of Transportation, as appropriate. Said application shall provide the tree warden or Commissioner of Transportation with a reasonably detailed plan, sketch or description of the location and nature of the pruning and/or removal for which the application is made. The tree warden retains full power and authority under Section 23-65(f) and may, for example, require additional information, establish procedures for monitoring the work, and place conditions on the work. No tree or shrub may be removed or pruned within the UPZ without the consent by written permit of the tree warden or Commissioner of Transportation, as appropriate, except when there is direct contact with an energized electrical conductor or there are visible signs of burning. [This incorporates and expands on item 6 in the RDD p. 18]

   5. Retention of compatible trees and shrubs and planting of right tree/right place trees and shrubs in the UPZ:
a. In proposing what pruning is necessary for utility infrastructure reliability and in conducting the pruning, consideration shall be given to tree species, condition, growth rate and failure characteristics, public right-of-way limitations, tree location, the potential combined movement of vegetation and conductors during routine winds, and sagging of conductors due to elevated temperatures or icing.

b. Pruning of vegetation shall be performed in accordance with current professional tree card standards and in a manner that retains the structural integrity and health of the vegetation.

c. The EDC shall consider critical loads on the circuit downstream of the pruning area, for which an alternative electrical power supply is not available in the event of an outage. A critical load is [a definition should be provided to ensure public understanding. Our understanding is that this means a facility that needs an uninterrupted supply of power. However, many such facilities, e.g. hospitals and data centers, have back-up generators to provide power during emergencies and would not seem to qualify as a critical load.]

d. Any non-hazardous tree located in whole or in part within the UPZ shall be retained, provided that its species, condition and growth rate indicate that pruning without removal will reduce the risk of harm to utility infrastructure reliability.

e. Right tree/right place trees and shrubs listed in the SVMTF Report and which have similar characteristics, such as maximum height, or are added to the list by DEEP in the future, shall remain in or be planted in the future in the UPZ, unless the tree is hazardous.

6. Affirmative written consent must be obtained from the private property owner to remove a tree that is on private property.

7. To the extent compatible with Sec. 16-234, as amended, vegetation management shall be performed in accordance with the following tree and shrub care industry standards:

   a. American National Standards Institute (ANSI) Z133.1
   b. Occupational Safety and Health Administration (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

The Authority will order each EDC to incorporate its VMP in its annual Maintenance Plan filings. The Authority will monitor the EDC's annual VMPs and their
actual achievements through the annual maintenance dockets and rate case proceedings, and will report its findings in a review of the vegetation management practices of each EDC to the joint standing committee of the General Assembly having cognizance of matters relating to energy, in accordance with Section 2 of Public Act 14-151.

The Authority will also require each EDC to include its vegetation management work plan activities for each town in its VMP. The EDC shall provide each municipality with the work plan so that they can more efficiently schedule and coordinate their tree work with the EDC vegetation management work schedule.

[This is the end of the suggested Vegetation Management Standards and Requirements that would be substituted for the section entitled Line Clearance Requirements]

The remaining paragraphs of the RDD section entitled Line Clearance Requirements are omitted entirely because they are inconsistent with the above and do not comply with Public Act 14-151 or because they are incorporated with revisions above. The OCC suggestion is unnecessary since the requirements for pruning prohibit excessive pruning that would harm the health and structural integrity of a tree, thereby creating a hazardous tree. Similarly, no tree should be shaved or otherwise pruned to become hazardous under Sec. 16-234, as amended. If abutting property owners are given meaningful notice of proposed pruning so that they can judge the impact on a tree's aesthetics, they can easily judge whether they would prefer removal. The last paragraph is puzzling, since it would seem to allow only one healthy, non-hazardous tall tree to remain at the end of each circuit. Clearly this is incompatible with Section 16-234, as amended.

The Vegetation Management Standards and Requirements we propose will allow EDCs, tree wardens, the Commissioner of Transportation and affected property owners to reach agreements that appropriately balance the reliability of the utility distribution system with the numerous economic, environmental, health and aesthetic benefits of trees, while reaching solutions that are appropriate to diverse rural, suburban and urban
settings and to diversity among neighborhoods in municipalities. In other words it allows for the diversity in vegetation management that the DEEP Bureau of Natural Resources, Forestry Division ("DFU") favored in its written and oral comments in this docket. We commend PURA for planning to include DFU in the review of annual vegetation management plans (RDD at page 11), and believe that the vegetation management standards and requirements proposed above will facilitate that collaboration.

As previously discussed, the proposed Vegetation Management Standards and Requirements list factors that need to be considered in determining how a tree or shrub should be pruned and whether a non-hazardous tree must be removed, but allow the decision-making to proceed in accordance with the objection, modification, mediation and appeal process set forth in Sec. 16-234, as amended by Public Act 14-151. If there is an appeal, PURA will not be put in the position of having prejudged the issue, due to rigid line clearance requirements that would mandate a predetermined result. PURA can consider all the evidence and fairly determine whether the utility has met the burden of proving that public convenience and necessity require the removal or pruning in question. It will also have a greater ability to request the involvement and recommendations of the DFU to find the best resolution of the appeal, as suggested on page 20, RDD. In addition, the flexibility that the Vegetation Management Standards and Requirements allow to reach solutions that preserve trees and shrubs and protect utility reliability will result in far fewer appeals and fewer mediations. Decisions will most likely be resolved at the local level for local conditions, as they have been in the past.

III. Two Additional Matters:
1. On page 10 of the RDD, the list of information to be required from the EDCs should substitute, in item 1c., "hazardous tree removal" for "risk tree removal," since the latter is not defined in Sec. 16-234. "Vegetation Management organization" or "line maintenance organization" should be substituted for "Line clearance organization" in item 3. In revising the RDD, "line clearance" should be eliminated throughout and "line maintenance" or a similar term used so as not to suggest a conflict with the requirements of Sec. 16-234, as amended.

2. On pages 11-12, RDD, it states:

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 or fax. Any customer who cannot be reached by email or fax shall be notified by certified mail with return receipt. 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 alternatives to tree trimming and/or removal.

The relationship between this statement and the statutory requirements for notice under Section 16-234, as amended, described at p. 19, RDD is unclear. The statutory notice requirements provide for notice by first class mail, electronic mail or text message, but the above statement provides for notice by fax and not by text message. Is the above intended to be a different notice than the statutory notice and perhaps much earlier than the statutory notice? This needs clarification. Certainly certified mail, return receipt requested, would eliminate the problems that have arisen with claims that no notice was received under the statutory provision.

IV. Request for delay in issuance of final decision and suspension of use of rigid line clearance standards by the EDCs.
Oral argument on Exceptions is scheduled for June 10, 2014 with the Final Decision expected to be issued the morning of the following day, June 11, 2014. We respectfully request that you delay issuing the Final Decision until you have had an opportunity to thoroughly consider not only the written Exceptions filed on June 6, 2014, but the oral arguments and any responses to questions you may have asked at oral argument.

We also respectfully request that you immediately order CL&P and UI to suspend use of its rigid line clearance requirements that depend solely on distance from the utility infrastructure, including for ETT and routine line clearance, pending your Final Decision in this docket.

IV. CONCLUSION

The revisions proposed above are necessary to ensure that vegetation management by the utilities complies with Public Act 14-151. The Act protects electric power reliability and the benefits of large tall non-hazardous trees, permitting the flexibility needed to accommodate diversity in the rural, urban and suburban roadside forest, as intended by the General Assembly.

Respectfully submitted,

Mary-Michelle Hirschoff
Spokesman on Trees and Power,
Garden Club of New Haven
P.O. Box 6197
Hamden, CT 06517 or
392 Sperry Road
Bethany, CT 06524
gardenclubnh2@gmail.com or mikeyuh@mac.com

16
I hereby certify that a copy of the foregoing has been mailed, electronically filed, and/or hand-delivered to the service list this 6th day of June, 2014

Mary-Michelle Hirschoff