STATE OF CONNECTICUT

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

DOCKET NO. 17-10-46RE02 APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY D/B/A EVERSOURCE ENERGY TO AMEND ITS RATE SCHEDULES – ENHANCED TREE REMOVAL

June 12, 2019

By the following Commissioners:

Michael A. Caron
John W. Betkoski, III

Lead Staff: S. Capozzi
Legal Advisor: Z. Alexander

DECISION

DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Public Utilities Regulatory Authority approves the request of the Connecticut Light and Power Company d/b/a Eversource Energy for incremental funding for its Enhanced Tree Removal system resiliency program to address the widespread roadside tree mortality in Connecticut that threatens the reliability of the company's distribution system. The allowed annual expenditures for the Enhanced Tree Removal program total $32.8 million per year for each of calendar years 2019 and 2020, inclusive of the incremental funding approved in this Decision.

B. BACKGROUND OF THE PROCEEDING

On November 22, 2017, in Docket No. 17-10-46, Application of The Connecticut Light and Power Company d/b/a Eversource Energy to Amend its Rate Schedules, the Connecticut Light and Power Company d/b/a Eversource Energy (CL&P or Company) submitted an application to the Public Utilities Regulatory Authority (Authority or PURA) for approval of amended rate schedules (Rate Case Application) pursuant to §§ 16-9 and 16-19e of the General Statutes of Connecticut (Conn. Gen. Stat.).

CL&P included within its Rate Case Application a proposal to fund Enhanced Tree Trimming (ETT) and Enhanced Tree Removal (ETR) resiliency programs as part of its larger system resiliency programs (New System Resiliency).

On January 11, 2018, CL&P, the Office of Consumer Counsel (OCC) and the Prosecutorial Staff of the Authority (PRO; together, Settling Parties) submitted a joint request to the Authority to approve a proposed settlement agreement (Settlement Agreement). The Settlement Agreement addressed the revenue requirement request included in the Company's Rate Case Application and, among other terms, allowed for the full funding of CL&P's proposed New System Resiliency programs as requested in the Rate Case Application. Settlement Agreement, p. 4.

By Interim Rate Case Decision dated March 28, 2018, in Docket No. 17-10-46, the Authority requested modifications to the Settlement Agreement, whereby the funding for both ETT and ETR remained as filed in the Rate Case Application for calendar year 2018, but reduced for calendar years 2019 and 2020. Interim Rate Case Decision, pp. 13 and 14. Specifically, the modifications sought a decrease in ETT funding by 50% in calendar years 2019 and 2020 and a decrease ETR funding by 33% in calendar years 2019 and 2020. Id. The Interim Rate Case Decision allowed the Company to seek additional funding in November 2018. Id.

In an Amended Settlement Agreement filed on March 23, 2018, the Settling Parties incorporated the requested reductions to both ETR and ETT funding. Amended Settlement Agreement, Section 3.a.ii.2, New System Resiliency. By Final Decision dated

April 18, 2018 in Docket No. 17-10-46 (Rate Case Decision), the Authority approved the Amended Settlement Agreement. Rate Case Decision, pp. 1, 14 and 15.

By Motion dated December 3, 2018 in Docket No. 17-10-46, and pursuant to Conn. Gen. Stat. § 16-9 and the Rate Case Decision, CL&P requested the Authority re-open the Rate Case Decision to review and approve the proposed incremental funding for the Company's ETR program in calendar years 2019 and 2020 (Application).

By Decision dated January 16, 2019, in Docket No. 17-10-46, and pursuant to §§ 16-9 and 16-19, the Authority established this proceeding to consider the Company's incremental ETR funding request for calendar years 2019 and 2020.

C. CONDUCT OF THE PROCEEDING

By Notice of Proceeding dated February 22, 2019, the Authority announced that it was conducting a contested proceeding pursuant to Conn. Gen. Stat. §§ 16-9 and 16-19 to address the issues raised in the Application.

By Notice of Hearing dated March 21, 2019, the Authority held a public hearing on April 23, 2019, at its offices, at the conclusion of which it closed the record in the proceeding. On May 2, 2019, the Authority held a hearing on Late Filed Exhibits at the Authority's offices.

The Authority issued a Proposed Final Decision in this matter on June 3, 2019. All Parties were provided the opportunity to submit Written Exceptions to, and present Oral Arguments on, the Proposed Final Decision.

D. PARTIES AND INTERVENORS OR PARTICIPANTS

The Authority recognized the following as Parties to this proceeding: The Connecticut Light and Power Company d/b/a Eversource Energy, 107 Selden Street, Berlin, Connecticut 06037; Office of Consumer Counsel, Ten Franklin Square, New Britain, CT 06051; and the Commissioner of the Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106.

II. PROPOSAL AND POSITIONS OF THE PARTIES

A. PROPOSAL OF CL&P

The Company's ETT program generally consists of removing hazard limbs and trees along lateral circuit segments and distribution bulk right-of-ways. Carey PFT, p. 3. The lateral portion of the ETT program differs from the Company's Scheduled Maintenance Trimming (SMT) expense program in that it targets the identification and removal of hazard limbs and trees along selected lateral circuits. Id. The limbs and trees targeted in the ETT program are outside of the normal trim zone, but fall within the utility protection zone[1] and pose reliability exposure to the Company's lateral circuit segments. Id. The Company selects circuit segments based on reliability performance, customer density, and system vulnerability. Id., pp. 4 and 5. The Company has not sought any incremental ETT funding in this Application. Id., p. 6.

The Company stated that the ETR program identifies and prioritizes for removal "hazard" and "risk" trees[2] that are adjacent to and outside of the trim zone but within a so-called "fall zone" along circuit backbones.[3] Id., p. 4. The proposal in the Application expanded the program to add lateral circuit segments with high customer count. Id., p. 4. The Company justified the need for the additional funding based primarily on environmental conditions related to the recent infestation of the Emerald Ash Borer (*Agrilus planipennis*), drought, and the infestation of oak trees by the Gypsy Moth (*Lymantria dispar*). Id., pp. 8 and 9.

In the Application, and as noted above, the Company proposed to maintain the ETT program for calendar years 2019 and 2020 at the spending level authorized in the Rate Case Decision, but sought additional incremental funding for ETR program for calendar years 2019 and 2020. Id., pp. 1, 2, 4, and 5. This request for incremental funding for ETR would bring the total combined ETT and ETR request to the amount originally requested by the Company in the Rate Case Application. Id., p. 6. The various requested and approved program amounts are summarized in Table 1 below.

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[1] "Utility protection zone" is defined in Conn. Gen. Stat. § 16-234(a)(2) as "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 sky."

[2] "Hazardous tree" is defined in Conn. Gen. Stat. § 16-234(a)(3) 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." "Risk trees" are defined by CL&P as trees that do not meet the statutory requirement of hazard trees but pose a "greater than-normal threat to system reliability" because of "proximity, lean, site condition and tree characteristics." Late Filed Exhibit No. 2.

[3] A backbone is a three-phase distribution feeder that begins at a substation and ends at transitions to single-phase or multi-phase circuits. CL&P defines the fall zone as proximity of a tree or part of a tree to the electric conductors and is dependent on tree characteristics such as tree height, lean, and distance to conductors. Tr. 4/23/19, p. 56.

Table 1. ETT and ETR Program Funding

Rate Case Application Proposed			
	ETT	ETR	TOT
2019	$26.2m	$19.7m	$45.9m
2020	$26.5m	$19.7m	$46.2m

Rate Case Decision Allowed			
	ETT	ETR	TOT
2019	$13.1m	$13.1m	$26m
2020	$13.25m	$13.1m	$26m

Application Requested			
	ETT	ETR	TOT
2019	$13.1m	$32.8m	$45.9m
2020	$13.25m	$32.85	$46.2m

Id., p. 7.

The Company justified the need for incremental ETR expense based on what it calls an unprecedented level of dead and dying roadside oak and ash trees due to drought and insect infestations. Id., pp. 1 and 2. The Company stated that the ETR program identifies and prioritizes for removal the trees that pose a safety hazard and an increased likelihood of tree-caused customer interruptions. Id., p. 4; Tr. 4/23/19, p. 20.

B. POSITION OF THE OCC

The Office of Consumer Counsel (OCC) argued that the Company has demonstrated the need to address tree mortality caused largely by the recent drought and the infestations of the Gypsy Moth and the Emerald Ash Borer. OCC Brief, pp. 6 and 7. The OCC argued that funding the ETR program at the requested level should reduce the likelihood of service interruptions for CL&P customers from hazard trees. Id.

III. AUTHORITY ANALYSIS

In the Interim Rate Case Decision, the Authority found that investment in the Company's vegetation management activities in the New System Resiliency programs warranted further investigation, both to assess the ongoing need for the programs and to address the rising costs. Interim Rate Case Decision, p. 13. The Authority sought to utilize the New Capital Tracker[4] as a means to evaluate the costs and effectiveness of the programs. Accordingly, the Authority has reviewed in this proceeding both the need

[4] The New Capital Tracker was contemplated at the time of the Settlement Agreement as a tool to increase transparency into resiliency (and select other) programs and allow for ongoing evaluation. Interim Rate Case Decision, p. 13; Settlement Agreement, p. 4. The New Capital Tracker was authorized in the Rate Case Decision.

for the ETR program itself, program effectiveness, and the Company's management of the program in the face of rising costs.

A. ETR PROGRAM NEED

According to the Company, the environmental conditions driving the need for the incremental expense come largely from the 2015–2017 drought, and the infestations of the Emerald Ash Borer and the Gypsy Moth. Id., pp. 8 and 9.

The Emerald Ash Borer infests and ultimately kills ash trees, which make up about 4% to 15% of Connecticut's forests. Id., p. 8. The Emerald Ash Borer first entered western Connecticut around 2012 and is expected to progress eastward, with the associated tree mortality to follow. Tr. 4/23/19, pp. 9 and 10. In 2018, western Connecticut began to face the peak of the Emerald Ash Borer infestation and eastern Connecticut was at the cusp of the infestation. Late Filed Exhibit No. 1, Attachment 1, p. 5. Emerald Ash Borer infestations progress from the cusp phase (when they are first detected) to crest phase (near 100% infestation) in about 5-10 years. Id. Ash trees that are infested will die and can potentially fall within three to five years. Tr. 4/23/19, p. 43.

Gypsy Moths feed on all sorts of trees and shrubs, but generally prefer oaks. Carey PFT, p. 9. Recent drought conditions combined with the infestations have significantly increased the mortality rate of oaks. Id. Connecticut also experienced an unexpected Gypsy Moth infestation during the winter of 2017 and 2018. Id., p. 10.

The Company further explained that the recent Gypsy Moth infestation may have been exacerbated, or caused in part, by the recent drought. Id., p. 9. Oak mortality is exacerbated because trees are increasingly weakened during drought conditions and when coupled with a Gypsy Moth infestation, the likelihood of mortality is further increased. Id. Gypsy Moth infestation may be caused in part by the drought because the fungus that controls the Gypsy Moth population depends upon adequate spring moisture, which was decreased due to drought conditions. Id.

The Company noted that it is not the only entity in Connecticut addressing this significant increase in tree mortality. Application, Attachment ACC-3. Connecticut municipalities, the State Department of Transportation, forestry experts, and homeowners all acknowledge the scale of tree mortality and struggle with finding the resources to manage the response. Id.

The Company participated in public forums with state agencies, elected town officials, tree wardens, and arboral and forestry experts. Carey PFT, pp. 10 and 11; Exhibit ACC-3; and Response to Interrogatory EL-4. Attendees of the meetings generally agreed that tree mortality is a potentially serious public safety hazard and that scale and scope of tree mortality is so large that it is beyond the capacity state agencies, towns, and utility companies to address. Response to Interrogatory EL-4.

The Authority finds that the Company has demonstrated the existence of an unprecedented scale of tree mortality. The Authority deems it reasonable to expect that ash tree mortality due to the Emerald Ash Borer will grow as it progresses eastward, and as already-affected ash trees in the western half of the state continue to die. Tree

mortality due to the 2015–2017 drought and the recent infestation of Gypsy Moths are more uncertain, due to the more variable nature of those environmental conditions. Accordingly, the Authority will continue to monitor the level of response needed by the Company to address tree mortality in the coming years as outlined in the section below.

B. ETR PROGRAM MANAGEMENT

The average cost per tree removal has increased from 2014 to 2017 by 56%, from about $850 per tree to $1,330 per tree. Response to Interrogatory EL-5. Labor and equipment costs make up roughly 85–90% of the total and have been the largest factor driving the cost increase, with labor costs increasing nearly 18% from 2014 to 2018 and equipment costs increasing 6% over 2014 costs. Id. To manage the rising costs, the Company uses a competitive bidding process for all vegetation management work (SMT, ETR and ETT) every three to four years, with the most recent competitive request for proposals completed in 2018 and contracts extending through 2022. Response to Interrogatories EL-5 and EL-8. CL&P also works with property owners to decrease wood removal costs, although such opportunities exist mostly in rural towns. Id.; Tr. 4/23/19, p. 88. Additionally, CL&P works with towns to negotiate the use of flaggers for traffic control. Response to Interrogatory EL-5.

The Company closely coordinates the ETR program with its SMT program in order to not duplicate the various inspection, coordination, traffic control, and outreach activities with municipal tree wardens and abutting land owners. Response to Interrogatory EL-12; Tr. 4/23/19, pp. 27, 99 and 100.

The Company provided a detailed plan by town for ETR with number of miles to be inspected along backbone and laterals. Response to Interrogatory EL-1. The Company prioritizes hazard and risk trees for removal based on highest impact and largest risk, and removes as many as funding allows. Tr. 4/23/19, p. 27.

The Company argued that increased costs must be expected to some degree as tree mortality grows, because addressing dead ash and oak trees typically requires special techniques, equipment, and crews for removal, as well as taking additional time to remove safely. Tr. 4/23/19, p. 25; Response to Interrogatory EL-7. These factors all contribute to the increasing costs of the program.

Local tree contractors at times do not have a sufficient supply of crews to meet the need for vegetation management in Connecticut. Tree contractors in general find it difficult to attract the skilled labor needed to perform the work. Tr. 4/23/19, pp. 96 and 97. Therefore, the Authority finds it reasonable that labor and equipment costs increase as the amount of tree-related work expands throughout the state.

The Authority acknowledges the factors contributing to the rising costs of the ETR program as the Company and other Connecticut entities respond to the current widespread tree mortality in Connecticut. The Authority finds that the Company has taken reasonable steps to manage the rising costs of the program, and has demonstrated that it manages the ETR program responsibly, by coordinating the ETR with its SMT program, using a competitive bidding process for vegetation management work, and working with the towns to works with towns and property owners to lower costs.

Accordingly, the Authority approves the requested ETR funding level as proposed in the Application for calendar years 2019 and 2020. The Authority will continue to monitor the ongoing need to address roadside tree mortality, including the changing environmental conditions that led to the increase in tree mortality, and the Company's management of rising program costs. The Authority will monitor the Company's ETR program through the capital tracker mechanism authorized in the Rate Case Decision. The Authority directs the Company to continue to follow the orders outlined in the Rate Case Decision relating to the ETR program.

If the Company seeks to continue the ETR program beyond calendar year 2020 at a funding amount above that which was approved in the Rate Case Decision, prior approval from the Authority will be required. Any request must demonstrate sufficient need for ETR at the requested level, as well as the results of cost-management efforts by the Company and the overall cost-effectiveness of the program at the allowed and proposed funding levels.

So that the Authority may continue to monitor and evaluate the ETR program, the PURA directs CL&P to include in the annual May New System Resiliency Capital Tracker filings[5], the following data updated with statistics from the preceding year:

1. The number of risk and hazard trees identified and removed by town and type of conductor (backbone, lateral) by year, as an update to Late Filed Exhibit No. 2.
2. The number of tree-caused events and customer interruptions as an update to the charts shown in CL&P's Responses to Interrogatories EL-6 and EL-6SP01.
3. SAIDI and SAIFI statistics as an update to the tables in CL&P's Response to Interrogatory EL-10.

IV. FINDINGS OF FACT

1. The proposed ETR program identifies and prioritizes for removal hazard and risk trees that are adjacent to and outside of the trim zone but within a so-called fall zone along circuit backbones and lateral circuit segments.

2. The need for the additional funding based primarily on environmental conditions related to the recent infestation of the Emerald Ash Borer, drought, and the infestation of primarily oaks by the Gypsy Moth.

3. The Company requested $32.8 million for ETR funding each year for calendar years 2019 and 2020.

4. The Emerald Ash Borer infests ash trees, which make up about 4% to 15% of Connecticut's forests.

[5] Section 3.a.ii.2.a of the Settlement Agreement requires CL&P to submit to the Authority annual "after-the-fact results" of proposed system resiliency by May 31.

5. The Emerald Ash Borer first entered western Connecticut around 2012, and is expected to progress eastward.

6. In 2018, western Connecticut was beginning to face the peak of the Emerald Ash Borer infestation and eastern Connecticut was at the cusp of the infestation.

7. Emerald Ash Borer infestations progress from the cusp phase to crest phase in about 5-10 years.

8. Infested Ash trees will die and can potentially fall within 3 to 5 years.

9. Gypsy Moths feed on all sorts of trees and shrubs but generally prefer oaks.

10. Recent drought conditions combined with the infestations have significantly increased the mortality rate of oaks.

11. Connecticut experienced an unexpected Gypsy Moth infestation during the winter of 2017 and 2018.

12. The recent Gypsy Moth infestation may have been exacerbated, or caused in part, by the recent drought.

13. Connecticut municipalities, the State Department of Transportation, forestry experts, and homeowners are responding to tree mortality.

14. The Company participated in public forums with state agencies, elected town officials, tree wardens, and arboreal and forestry experts to address tree mortality.

15. The average costs per tree removal has increased from 2014 to 2017 by 56%, from about $850 per tree to $1,330 per tree.

16. Labor and equipment costs make up roughly 85–90% of the total and have been the largest factor driving the cost increase, with labor costs increasing nearly 18% from 2014 to 2018 and equipment costs increasing 6% over 2014 costs.

17. The Company uses a competitive bidding process for tree removal, with the most recent contracts extending through 2022.

18. CL&P also works with property owners to decrease wood removal costs, finding opportunities mostly in rural towns.

19. CL&P works with towns to negotiate the use of flaggers for traffic control.

20. The Company coordinates the ETR program with its SMT program in order to not duplicate the various inspection, coordination, traffic control, and outreach activities with municipal tree wardens and abutting land owners.

21. The Company provided a detailed plan by town for ETR with number of miles to be inspected along backbone and laterals.

22. The Company prioritizes for removal hazard and risk trees based on highest impact and largest risk and removes as many as funding allows.

23. Removing dead trees requires extra care, advanced techniques, specialized equipment and crews, and additional time to remove safely.

24. Local tree contractors at times do not have a sufficient supply of crews to meet the need for vegetation management in Connecticut.

25. Tree contractors in general find it difficult to attract the skilled labor needed to perform the work.

V. CONCLUSION AND ORDER

A. CONCLUSION

The Authority concludes that the incremental funding request by the Connecticut Light and Power Company for the Enhanced Tree Removal program is reasonable under the current environmental conditions affecting roadside tree mortality and is, at this time, necessary for the safe and reliable delivery of electric service. If the Company seeks to continue funding beyond calendar year 2020 for an amount above that which was approved in the Rate Case Decision, the Company must first seek approval from the Authority.

B. ORDER

For the following Order, the Company shall submit one original of the required documentation to the Executive Secretary, 10 Franklin Square, New Britain, Connecticut 06051 and file an electronic version through the Authority's website at www.ct.gov/pura. Submissions filed in compliance with the Authority's Orders must be identified by all three of the following: Docket Number, Title and Order Number. Compliance with orders shall commence and continue as indicated in each specific Order or until the Company requests and the Authority approves that the Company's compliance is no longer required after a certain date.

1. In the relevant capital tracker filings, CL&P shall file the required information detailed in Section III.B. ETR Program Management.

DOCKET NO. 17-10-46RE02 **APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY D/B/A EVERSOURCE ENERGY TO AMEND ITS RATE SCHEDULES – ENHANCED TREE REMOVAL**

This Decision is adopted by the following Commissioners:

Michael A. Caron

John W. Betkoski, III

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.

June 12, 2019

Jeffrey R. Gaudiosi, Esq.
Executive Secretary
Public Utilities Regulatory Authority

Date