STATE OF CONNECTICUT

PUBLIC UTILITIES REGULATORY AUTHORITY

Docket No. 26-05-10

APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY
D/B/A EVERSOURCE ENERGY
TO AMEND ITS RATE SCHEDULES

DIRECT TESTIMONY OF

NED W. ALLIS

Depreciation

On behalf of

Connecticut Light & Power Company
d/b/a Eversource Energy

July 14, 2026

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DIRECT TESTIMONY OF

NED W. ALLIS

I. INTRODUCTION

Q. Please state your name and address.

A. My name is Ned W. Allis. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania, 17011.

Q. Are you associated with any firm?

A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"), part of GFT Infrastructure, Inc.

Q. How long have you been associated with Gannett Fleming?

A. I have been associated with the firm since October 2006.

Q. What is your position with the firm?

A. I am Senior Vice President of Gannett Fleming, Valuation and Rate Consultants, LLC.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of The Connecticut Light & Power Company ("CL&P" or the "Company").

Q. Please state your qualifications.

A. I have over 19 years of depreciation experience and have provided expert testimony in

more than one hundred cases before more than twenty regulatory commissions, including the Connecticut Public Utilities Regulatory Authority ("PURA"). I have also worked on many other depreciation assignments while at Gannett Fleming, which includes assisting other expert witnesses from my firm in numerous U.S. jurisdictions and two Canadian provinces. Please refer to Exhibit CLP-DEPRECIATION-2 for additional information on my qualifications, which includes my leadership in the Society of Depreciation Professionals ("Society") and participation as a faculty member for depreciation training conducted by the Society.

Q. Are you presenting any exhibits in addition to your testimony?

A. Yes. I am presenting the following exhibits as part of my testimony in this case:

Exhibit	Description
Exhibit CLP-DEPRECIATION-1	Direct Testimony of Ned W. Allis
Exhibit CLP-DEPRECIATION-2	Qualification Statement
Exhibit CLP-DEPRECIATION-3	Depreciation Study
Exhibit CLP-DEPRECIATION-4	Comparison of Proposed Annual Depreciation Expense vs. Current Annual Depreciation Expense

II. SUMMARY

Q. What is the purpose of your testimony?

A. My testimony presents and supports the depreciation study ("Depreciation Study") my firm conducted for CL&P, submitted as Exhibit CLP-DEPRECIATION-3. The study provides annual depreciation rates and accruals as of December 31, 2025, as well as

the recommended service life and net salvage estimates used in the development of these rates.

Q. Please summarize the change in the depreciation accrual rates and associated depreciation expense produced by the Depreciation Study.

A. The table below sets forth a comparison of the current depreciation rates and resultant expense of the proposed depreciation rates by function as of December 31, 2025.

	Current		Proposed	
Function	**Accrual Rate**	**Pro Forma Expense**	**Accrual Rate**	**Expense**
Distribution Plant	2.85	$235,997,194	3.87	$320,287,974
General Plant	3.30	$18,014,725	4.40	$24,012,938
Reserve Adj. for Amortization				($260,369)
Total Depreciable Plant	2.88	$254,011,919	3.90	$344,040,543

Q. Please explain the major factors that caused the change in depreciation rates.

A. There are two primary factors that caused the change in depreciation rates. First, service life and net salvage estimates for several accounts are different from those used for the current depreciation rates. The Company's current depreciation parameters and rates are based on a settlement agreement in Docket No. 17-10-46, in which the resulting depreciation rates were lower than those in the previous depreciation study. The current estimates in the Depreciation Study are relatively similar to the prior study for some plant accounts. However, for several other accounts the study indicates shorter service lives or more negative net salvage than those incorporated into the current depreciation rates. The Depreciation Study generally supports similar conclusions as the prior depreciation study, which indicates that the current

depreciation rates, adopted in a settlement in Docket No. 17-10-46, are lower than they should be.

Second, because the Company currently uses lower depreciation rates, accumulated depreciation is lower than indicated in the Depreciation Study. When depreciation rates are calculated using the remaining life technique, the calculations incorporate the current plant and reserve balances. Calculating depreciation using the current depreciation parameters therefore results in higher depreciation rates than the current depreciation rates due to changes in the plant and reserve balances, which is a further indication that the current depreciation rates are too low. This factor accounts for approximately $36 million of the $90 million increase. The remaining portion reflects shorter service lives or more negative net salvage estimates for several accounts.

III. DEPRECIATION

A. Definition of Depreciation

Q. Please define the concept of depreciation.

A. Depreciation is defined in PURA's Uniform System of Accounts ("USofA") for Electric Utilities:

> 'Depreciation,' as applied to depreciable utility plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and

requirements of public authorities.[1]

Q. What is the objective of depreciation?

A. The objective of depreciation is to allocate, in a systematic and rational manner, the full cost of an asset (original cost less net salvage) over its service life – that is, over the period of time that the asset provides service. This allocation is done so that expenses match revenues and, when included as an expense in the revenue requirement, customers equitably pay for the costs of the assets that provide their service. It also follows that one objective of depreciation is to mitigate the potential for current customers having to pay for the costs of assets that have already been retired and no longer provide benefit to them. This objective is particularly important for an electric utility, given the long-lived nature of transmission and distribution infrastructure and the potential for changes in customer usage, service territories, or system configuration over time.

Q. Does the USofA define "service value" and "service life"?

A. Yes. USofA defines service value as:

> 'Service value' means the difference between original cost and net

[1] Definition 11, USofA Prescribed for Electric Utilities, as provided by PURA's Executive Secretary pursuant to R.S.C.A § 16-27-7. Please note the FERC Uniform System of Accounts definition of depreciation is essentially identical, stating "Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities." 18 C.F.R. 101 (FERC Uniform System of Accounts), Definition 12.

salvage value of utility plant.[2]

Combined with the definition and instruction above, the definition and use of service value means that both the original cost and future net salvage should be allocated to depreciation expense over the service life of utility property. Both are a part of the cost of the asset and both are recovered in the same manner through depreciation expense over the service life.

The USofA defines service life as follows:

> 'Service life' means the time between the date utility plant is includible in utility plant in service, or utility plant leased to others, and the date of its retirement. If depreciation is accounted for on a production basis rather than on a time basis, then service life should be measured in terms of the appropriate unit of production. [3]

Thus, both the original cost and net salvage should be allocated in a systematic and rational manner over the service life of property. This is most commonly done in equal amounts each year (*i.e.*, using the straight line method), which, under most – though not all – operating conditions is traditionally considered to be equitable to different generations of customers.

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[2] Definition 26, USofA Prescribed for Electric Utilities, as provided by PURA's Executive Secretary pursuant to R.S.C.A § 16-27-7.

[3] Definition 25, USofA Prescribed for Electric Utilities, as provided by PURA's Executive Secretary pursuant to R.S.C.A § 16-27-7.

B. Depreciation and Ratemaking

Q. How does depreciation impact a utility company and its customers?

A. Depreciation is both an important and complicated concept because it affects utility accounting – and as a result both customer rates and earnings – in more than one way. Perhaps best understood is that depreciation is both an expense and a component of a utility's revenue requirement. However, there are also longer-term impacts due to accumulated depreciation's effect on rate base. As a result, lower depreciation today means both higher depreciation and a higher return on rate base in the future, which over time increases costs to customers. Additionally, lower depreciation reduces cash flow which can impact financial metrics such as credit ratings.

Q. Please explain further how depreciation affects a utility's revenues, expenses, and customer rates.

A. For regulated utilities, depreciation is a component of the revenue requirement. It is also an expense on the company's books and, as an expense, annual depreciation accruals are a reduction to a company's earnings. Depreciation, therefore, has an effect on both revenues and expenses. This is consistent with the concept of the "matching principle" used in accounting, which provides a requirement to recognize expenses on the income statement in the same period in which the related revenues are earned. *Depreciation Systems*, a widely cited depreciation text, explains the matching principle as:

> The matching principle requires that all revenues earned during a given time period be matched with all the expenses incurred in that same time

period to produce these revenues.[4]

It follows from this principle that the depreciation of capital assets which have lives that extend beyond one year should be recognized over the useful lives of these assets. As noted by the National Association of Regulatory Utility Commissioners ("NARUC"), a cost allocation concept for depreciation "satisfies the accounting principle of matching expense and revenues."[5]

From a ratemaking standpoint, depreciation impacts both the revenues from customers, as annual depreciation expense is part of the revenue requirement, and the expenses charged to a given year. If depreciation is such that the depreciation expense over the life of an asset recovers the full cost of the asset (which includes the cost to retire the asset at the end of its life), then customer rates established based on these depreciation accruals will provide a return of capital to utility investors who originally provided the capital to invest in the asset.

A related concept in utility ratemaking is "intergenerational equity," in which customers who receive the benefit of a utility asset should pay their fair share of the costs of the asset. If too much depreciation is reflected in the early years of an asset's life, then customers in the early years will pay a disproportionate share of the cost of the asset, while customers in later years will pay less than their fair share. Conversely,

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[4] *Depreciation Systems*, Frank K. Wolf and W. Chester Fitch, 1994, p. 5.

[5] *See* National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p.12.

if depreciation is too low in the earlier years, then the costs of the asset would be unfairly borne by a future generation of customers.

Q. Does the depreciation recorded in prior years also affect customer rates?

A. Yes. There is an additional way in which depreciation affects both customer rates and a Company's earnings. Accumulated depreciation, which is effectively a running total of depreciation that has occurred in the past, is a reduction to rate base. As a result, while higher depreciation will have a short-term impact of increasing the revenue requirement in a given year, its longer-term impact will be to reduce rate base and, in turn, the return on rate base. The converse is also true. Lower depreciation expense will have a short-term effect of reducing the revenue requirement but over the long-term will result in a higher rate base and a higher return on rate base. Thus, when considering the impact on customers due to depreciation, there are both short-term and long-term impacts to consider and often these impacts move in the opposite direction from one another.

This concept is explained by NARUC:

> The regulatory body prescribing depreciation rates is thus confronted with a decision which affects both short-run and long-run interests of the customer and the company. If a commission prescribes rates which yield depreciation accruals that are too low, the revenue requirement in the short run may be lower. But the requirements for income taxes and return may offset the apparent savings in depreciation expense, so service rates in the long run may be higher. If depreciation rates are set so low that the revenue requirement fails to repay the capital invested in a group of property by the end of its service life, confiscation takes place or the unpaid cost remains in the rate base until amortized or expensed. On the other hand, if the regulatory body establishes depreciation rates toward the upper end of the zone of reasonableness, rates for service

will be higher in the short-run, but may be lower in the long-run.[6]

Q. Does depreciation expense impact other aspects of a utility's finances?

A. Yes. A reduction in depreciation expense means a reduction in cash flow, since depreciation is part of the revenue requirement. If depreciation is too low, its impact on cash flows can impact credit ratings and therefore, its cost of capital. Lower depreciation also means that a utility would have to raise more externally generated funding for necessary infrastructure investments than if depreciation expense was higher, which puts added pressure on a utility's credit metrics.

IV. DEPRECIATION STUDY

A. Depreciation Study

Q. What is the purpose of the Depreciation Study?

A. The purpose of the Depreciation Study is to estimate the annual depreciation rates and accruals for CL&P's plant in service for financial and ratemaking purposes, and to determine appropriate average service lives and net salvage percentages for each plant account.

Q. In preparing the Depreciation Study, did you follow generally accepted practices in the field of depreciation?

A. Yes. The study is based on widely accepted depreciation methods and procedures, including the methods used to estimate service lives and net salvage.

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[6] *See* National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 23.

Q. Are the methods and procedures of this Depreciation Study consistent with the Company's past practices?

A. The depreciation methods and procedures of this study are the same as those used in the past by the Company. Both the existing rates and the rates determined in the Depreciation Study are based on the broad group procedure, the remaining life technique and straight line method.

Q. Please describe the contents of the Depreciation Study.

A. The Depreciation Study is presented in nine parts. Part I, Introduction, presents the scope and basis for the Depreciation Study. Part II, Estimation of Survivor Curves, includes descriptions of the methodology of estimating survivor curves. Parts III and IV set forth the analysis for determining service life and net salvage estimates. Part V, Calculation of Annual and Accrued Depreciation, includes the concepts of depreciation and amortization using the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Part VI also includes Table 1 (*see* pages VI-4 and VI-5), which presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2025, the book depreciation reserve, and the calculated annual depreciation accrual and rate for each account or subaccount. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations by account. The section beginning on page VIII-2 presents the results of the salvage analysis. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2025.

Q. Please explain how you performed the Depreciation Study.

A. For the depreciation rates recommended in the study, I used the straight line remaining life method of depreciation, also referred to as the straight line method and remaining life technique, with the average service life procedure. The annual depreciation rates and accruals are based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and reasonable manner.

For Plant Accounts 363.11, 363.12, 363.31, 391.1, 391.2, 393, 394, 395, 397.74, 397.75 and 398, I used the straight line remaining life method of amortization. The annual amortization is based on amortization accounting that distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account and vintage.

Q. How did you determine the recommended annual depreciation accrual rates?

A. I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable property group – that is, each plant account or subaccount identified as having similar characteristics. In the second phase, I calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase.

B. Service Life and Net Salvage Estimates

Q. Please describe further the first phase of the Depreciation Study, in which you estimated the service life and net salvage characteristics for each depreciable property group.

A. The service life and net salvage study consisted of compiling historical data from records related to CL&P's plant; analyzing these data to obtain historical trends of survivor characteristics; obtaining supplementary information from the Company's management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the data and the estimates used by other electric utilities to form judgments of average service life and net salvage characteristics.

Q. What historical data did you analyze for the purpose of estimating service life characteristics?

A. I analyzed the Company's accounting entries that record plant transactions during the period 1901 through 2025 to the extent available, although the earliest year of data varied by account. The transactions I analyzed included additions, retirements, transfers, sales and the related balances.

Q. What method did you use to analyze these service life data?

A. I used the retirement rate method for most plant accounts. This is the most appropriate method when retirement data covering a long period of time is available, because this method determines the average rates of retirement actually experienced by the Company during the period of time covered by the Depreciation Study.

Q. Please describe how you used the retirement rate method to analyze the Company's service life data.

A. I applied the retirement rate analysis to each different group of property in the study. For each property group, I used the retirement rate data to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. I used the "Iowa-type survivor curves" to perform these interpretations.

Q. What are "Iowa-type survivor curves" and how did you use such curves to estimate the service life characteristics for each property group?

A. Iowa-type survivor curves are a widely used group of survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. These curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa-type survivor curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in CL&P's Depreciation Study to describe the forecasted rates of retirement

based on the observed rates of retirement and the outlook for future retirements. The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 50-R2.5 indicates an average service life of 50 years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 2.5, for the mode (possible modes for R type curves range from 0.5 to 5).

Q. Did you physically observe the Company's electric plant and equipment as part of your Depreciation Study?

A. Yes. Gannett Fleming made field reviews of CL&P's property as part of the previous study in February 2017 and the current study in April 2026 to observe representative portions of plant. Field reviews are conducted to become familiar with company operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. This knowledge, as well as information from other discussions with the Company's management and operating personnel, was incorporated in the interpretation and extrapolation of the statistical analyses.

Q. How did your experience in development of other depreciation studies affect your work in this case for the Company?

A. Because I customarily conduct field reviews for my depreciation studies, I have had the opportunity to visit similar facilities and meet with management and operations personnel at other utilities. The knowledge I have accumulated from those visits and

meetings provides useful information to draw upon to confirm or challenge the numerical analyses concerning the service life and net salvage estimates.

Q. Are the factors considered in your estimates of service life and net salvage percentages presented in the Depreciation Study?

A. Yes. Discussions of the types of factors considered in the estimation of service lives and net salvage percentages are presented in Parts III and IV of the study.

Q. Please describe how you estimated net salvage percentages.

A. Similar to service life estimates, net salvage estimates incorporate a variety of data and information related to past and future operations of the company studied. Statistical support includes analysis of the actual historical data from 1999 through 2025, using industry standard methods of analysis. For the primary Company-specific analysis, historical cost of removal and gross salvage were expressed as a percentage of retirements. The net salvage percentages in the Depreciation Study are based on a combination of statistical analyses and informed judgment. The statistical analyses consider the cost of removal and gross salvage ratios to the associated retirements during the 27-year period. Trends of this data are also measured based on three-year moving averages and the most recent five-year indications.

Throughout my career, Gannett Fleming has performed depreciation studies that include net salvage analyses for hundreds of utilities across the country. I have also worked on projects with our engineering business group that designs electric utility assets and systems. This broad experience, as well as consideration of net salvage

estimates for other electric utilities and industry trends, are all considered when developing net salvage estimates.

Q. Please discuss in more detail the statistical analysis of historical data.

A. The method I have used in the Depreciation Study to analyze historical net salvage is the industry standard and has been used for many years in most regulatory jurisdictions to analyze net salvage data. It is the same method used in the prior depreciation study for the Company. For reasons I discuss in more detail, more recent data and other factors support different net salvage estimates for some accounts than those currently used. However, the method of analyzing historical net salvage currently used for the Company continues to be the most appropriate way to analyze the Company's net salvage data.

In cases for the Company's natural gas affiliate and for Avangrid's electric and natural gas utilities, PURA has more recently adopted depreciation rates based on a different method of estimating net salvage. In cases before PURA, I have detailed the flaws in that method, which I refer to as the "Historical Expense" method. I discuss some of the issues with the Historical Expense method below, most notably that the Historical Expense method results in net salvage estimates that do not fully recover future net salvage costs. This also means that, while this method may have had the short-term impact of reducing rates, it will ultimately cost customers more in the long run.

C. Method of Estimating Net Salvage

Q. Please explain the concept of "net salvage."

A. Net salvage is a component of the service value of capital assets that is recovered through depreciation rates. The service value of an asset is its original cost less its net salvage. Net salvage is the gross salvage value received for the asset upon retirement less the cost to retire the asset. When the cost to retire the asset exceeds the salvage value, the result is negative net salvage.

Q. How is net salvage included in depreciation?

A. Future net salvage is part of the overall service value of plant in service and, as with the original cost of plant, is allocated on a straight line basis over the service life of the property. Typically, net salvage estimates are estimated as a percentage of original cost.

Q. Why is net salvage included in depreciation expense?

A. Net salvage is a component of the full capital cost of an asset used to provide utility service. Just as depreciation allocates the original cost of an asset over its service life, the same should occur for any net salvage costs associated with the asset. From an accounting standpoint, the inclusion of net salvage in depreciation satisfies the matching principle as it matches the capital cost of assets (including net salvage) with the periods over which these assets generate revenues. From a ratemaking standpoint, the inclusion of net salvage in depreciation results in customers paying their fair share of the full cost of service for each asset, including not only the original capital costs of

placing the asset in service, but also the end-of-life costs associated with retiring the asset. Including future net salvage helps to prevent the intergenerational inequity that would occur if assets were retired before the related retirement costs were recovered through depreciation.

The NARUC publication *Public Utility Depreciation Practices* explains on page 157:

> Historically, most regulatory commissions have required that both gross salvage and cost of removal be reflected in depreciation rates. The theory behind this requirement is that, since most physical plant placed in service will have some residual value at the time of retirement, the original cost recovered through depreciation should be reduced by that amount. Closely associated with this reasoning is the accounting principle that revenues be matched with costs and the regulatory principle that utility customers who benefit from the consumption of plant pay for the cost of that plant, no more, no less. The application of the latter principle also requires that the estimated cost of removal of plant be recovered over its life.

NARUC explains this concept further and explains the type of analysis used to estimate net salvage on page 18:

> Under presently accepted concepts, the amount of depreciation to be accrued over the life of an asset is its original cost less net salvage. Net salvage is the difference between the gross salvage that will be realized when the asset is disposed of and the cost of retiring it. Positive net salvage occurs when gross salvage exceeds cost of retirement, and negative net salvage occurs when cost of retirement exceeds gross salvage. Net salvage is expressed as a percentage of plant retired by dividing the dollars of net salvage by the dollars of original cost of plant retired. The goal of accounting for net salvage is to allocate the net cost of an asset to accounting periods, making due allowance for the net salvage, positive or negative, that will be obtained when the asset is retired. This concept carries with it the premise that property ownership includes the responsibility for the property's ultimate abandonment or removal. Hence, if current users benefit from its use, they should pay their pro rata share of the costs involved in the abandonment or removal of the property and also receive their pro rata share of the benefits of the

proceeds realized. (Emphasis added)[7]

Q. How is net salvage estimated?

A. Net salvage is typically estimated based on an analysis of historical net salvage data combined with informed judgment that incorporates other factors such as industry experience, information obtained from site visits and meetings with Company personnel, and the typical estimates for similar property for other utilities. The analysis of historical data is based on determining annual and longer-term average levels of net salvage expressed as a percentage of retirements recorded in the same period. The resultant net salvage estimates are also expressed as a percentage of retirements and applied to the current plant in service balance to calculate estimated future net salvage for assets currently in service.

Most types of utility property typically experience negative net salvage, meaning that cost of removal exceeds gross salvage. In the case of electric utilities, the retirement of poles, wires, underground conductors, transformers, and related equipment often requires excavation, system modifications, traffic control, and site restoration activities that result in removal costs that exceed any gross salvage value. These costs are appropriately recognized as part of net salvage and are recovered through depreciation over the service life of the related assets.

[7] The underlined passages provide guidance on the method used for net salvage. NARUC explains that net salvage is analyzed by expressing net salvage as a percentage of retirements and that customers should pay their pro rata share of future net salvage over the life of the property (meaning in equal amounts over the life, *i.e.*, the straight line method). The net salvage method I have used is also described in Chapter XI of NARUC (p. 159).

Another important concept is that net salvage recorded in a given year is a function of the amount of property retired. For example, it would cost more to retire 1,000 poles in a given year than it would cost to retire 100 poles. The method used to estimate net salvage needs to recognize this relationship because, as I discuss, the number of assets retired in a given year varies over time.

Q. Why is historical net salvage expressed as a percentage of retirements in the historical net salvage analysis?

A. Net salvage is expressed as a percentage so that it can be applied to the original cost of plant in service (or, equivalently, the original cost of future retirements for the assets in service today) to determine the future net salvage to be included in the calculation of depreciation rates. Applying the estimated net salvage percent to the current plant in service balance allows for a consistent approach regardless of how the plant balances change over time. The use of net salvage as a percentage of retirements also means that the statistical analysis provides meaningful indications of future net salvage ratios regardless of the quantity of retirements in a given year or years. This is important – as I will explain, the quantity of retirements can and does vary over time.

Q. Has the traditional method been used in Connecticut?

A. Yes. The traditional method has been used in Connecticut, as is true for most states, and was used for the Company's most recent depreciation study in Docket No. 17-10-46. However, more recently, Connecticut has adopted the Historical Cost method for estimating net salvage for the Company's natural gas affiliate and Avangrid's natural gas and electric utilities. For the Historical Cost method, average annual recorded net

salvage is compared to the annual net salvage accruals resulting from a specific net salvage estimate. Due to several flaws in the method, the Historical Cost method underestimates future net salvage.

Q. Has the Historical Cost method been used exclusively in Connecticut?

A. No. In the cases in which the Historical Cost method was adopted above, the method was proposed by the Office of Consumer Counsel ("OCC") and PURA noted that adoption of the net salvage method would be considered on a case-by-case basis. In a recent case for Aquarion Water Company, OCC's recommended depreciation rates were based on the Traditional Method.[8]

Q. Please explain the Historical Cost Method.

A. In recent base distribution rate cases for The United Illuminating Company, Connecticut Natural Gas Corporation, The Southern Connecticut Gas Company and Yankee Gas Services Company, PURA has adopted the Historical Cost Method proposed by a consultant for the OCC, which produced lower depreciation expense than the traditional method. However, the Historical Cost Method does not have a sound basis for its analysis, the underlying premise of the Historical Cost Method is that net salvage accruals should be correlated to recent net salvage costs, which is incorrect. Net salvage accruals recover future net salvage costs, whereas net salvage costs are related to assets that have been retired from service. These are rarely the same

[8] Docket No 25-12-12, Pre-Filed Testimony of David J. Garrett, p. 60.

value.

As an illustration of why, consider a single unit of property. If the net cost to remove this asset is $100 and it will be in service for 10 years, then allocating $10 of the removal cost to each year of service would equitably allocate and recover these future removal costs on a straight line basis over the asset's service life. However, the actual incurred net removal costs would be very different from the proper $10 per year net salvage accrual amount recovered in rates – actual incurred net removal costs would be $0 in each year but the last year, at which time the actual incurred net removal costs would be $100, or 10 times higher than the proper $10 per year net salvage accrual amount recovered in rates. The net salvage accruals and net salvage costs are not, and should not be, the same. Unlike net salvage *ratios* used in the traditional method, net salvage costs and net salvage accruals are not correlated in any way.

Q. Do any depreciation textbooks support the Historical Cost Method of comparing net salvage accruals to annual net salvage costs?

A. No.

Q. Is the method adopted by PURA in recent base distribution rate cases widely used in other jurisdictions?

A. No, it is not.

Q. Has FERC affirmed the use of the traditional method you have used?

A. Yes. FERC affirmed the traditional method in Opinion No. 572.[9] FERC rejected two

[9] FERC Opinion No. 572, issued October 15, 2020 in Docket No. ER16-2320-002, paragraph 127.

alternative net salvage methods in that case, including one based on the same premise as the Historical Cost method.[10]

Q. Are you familiar with any other state commissions that have specifically rejected alternative proposals for net salvage and adopted the traditional method?

A. Yes. There are a number of states that have specifically rejected alternative methods for net salvage and affirmed the traditional method. For example, Michigan,[11] Georgia,[12] California,[13] Vermont,[14] Indiana,[15] West Virginia,[16] Missouri,[17] Illinois,[18]

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[10] OCC's consultant argued against the use of the Traditional Method due to concerns regarding allocating future inflation to current years. However, in Opinion No. 523, FERC rejected a "SFAS 143 approach" (which discounts future net salvage to today's value) and affirmed that net salvage cost estimates included in depreciation should include future inflation in order to achieve intergenerational equity.

[11] *See* Michigan Public Service Commission Order, Case No. U-15629 filed September 29, 2009.

[12] *See* Georgia Public Service Commission Docket No. 31647, Final Order, filed December 21, 2010, p. 9.

[13] The commission in California has upheld the traditional method in multiple decisions. *See*, for example California D.07-03-044 in A.05-12-002, pp. 226 and 227.

[14] Vermont Docket Nos. 6946 and 6988, Order Issued March 29, 2005, pp. 116-117.

[15] Indiana Cause No. 42359, Order Issued May 18, 2004, pp. 71-72.

[16] *See*, for example, West Virginia consolidated Dockets No. 06-0960-E-427 and 06-1426-E-D. On p. 27 of the Order the West Virginia Commission states that "[t]he Commission shall authorize the Companies to use the depreciation rates recommended by Staff." In these cases, Staff had recommended changes to net salvage for generating plants but as stated on p. 5, lines 14-17 of Staff witness deGruyter's testimony did not object to "including net salvage for most mass property accounts where items are routinely removed and replaced, nor to interim retirements within location life or unit life assets such as generating plants." Staff therefore recommended the traditional method, which the Commission accepted. I should note that while the Commission in West Virginia adopted different net salvage estimates for electric generation, this did not change the use of the traditional method in West Virginia.

[17] *See* Docket No. GR-99-315, Third Report and Order issued January 11, 2005.

[18] *See* pages 138 and 138 of the Order in Dockets No. 07-0585, 07-0586, 07-0587, 07-0588, 07-0589 and 07-0590.

Washington,[19] Oregon,[20] Massachusetts,[21] and Texas[22] have adopted depreciation rates based on the traditional method in litigated base distribution rate cases.

Q. What have you recommended?

A. The depreciation rates I recommend for the Company incorporate the traditional method of analysis for net salvage. This is the same method used for the Company's current depreciation rates.

D. Depreciation Calculations

Q. Please describe the second phase of the process that you used in the Depreciation Study in which you calculated composite remaining lives and annual depreciation accrual rates.

A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group using the straight line remaining life method and using remaining lives weighted consistent with the average service life procedure. The calculations of annual depreciation accrual rates were developed as of December 31, 2025.

Q. Please describe the straight line remaining life method of depreciation.

A. The straight line remaining life method of depreciation allocates the original cost of the

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[19] Dockets UE-170033 and UG-170034.

[20] *See* Accounting Order 03-455 for PacifiCorp. PacifiCorp continues to use the traditional method for net salvage in Oregon.

[21] *See* Massachusetts Docket No. D.P.U. 17-05-F, Order on Eversource's Motion for Reconsideration and Motion for Leave to File a Response, dated May 11, 2018, p. 13.

[22] Texas PUC Docket No. 35717, Proposal for Decision, p. 166.

property, less accumulated depreciation, less future net salvage, in equal amounts to each year of remaining service life.

Q. Please describe the average service life procedure for calculating remaining life accrual rates.

A. The average service life procedure defines the group or account for which the remaining life annual accrual is determined. Under this procedure, the annual accrual rate is determined for the entire group or account based on its average remaining life and the rate is then applied to the surviving balance of the group's cost. The average remaining life of the group is calculated by first dividing the future book accruals (original cost, less allocated book reserve less future net salvage) by the average remaining life for each vintage. The average remaining life for each vintage is derived from the area under the survivor curve between the attained age of the vintage and the maximum age. The sum of the future book accruals is then divided by the sum of the annual accruals to determine the average remaining life of the entire group for use in calculating the annual depreciation accrual rate.

Q. Please describe amortization accounting, in contrast to depreciation accounting.

A. Amortization accounting is used for accounts with a large number of units, but small asset values. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. However, depreciation accounting is difficult for these types of assets because depreciation accounting requires periodic inventories to properly reflect plant in service. Consequently, amortization accounting is used for these types of assets, such that retirements are recorded when a vintage is

fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirements in amortization accounting. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period that represents an anticipated life during which the asset will render full benefit. For example, in amortization accounting, assets that have a 15-year amortization period will be fully recovered after 15 years of service and taken off the Company's books at that time, although they may not necessarily be physically removed from service. In contrast, assets that are physically taken out of service before 15 years remain on the books until the amortization period for that vintage has expired.

Q. Is amortization accounting used for certain plant accounts in the Depreciation Study?

A. Yes. However, amortization accounting is only appropriate for certain accounts. These accounts, which represent approximately 2.13 percent of the Company's depreciable plant, are 363.11, 363.12, 363.31, 391.1, 391.2, 393, 394, 395, 397.74, and 398.

Q. Have you made additional recommendations for these amortization accounts?

A. Yes. In the Company's previous base distribution rate case, Docket No. 17-10-46, PURA adopted a 10-year amortization of reserve for these amortization accounts. This amortization was designed to align the reserve with the amortization periods for each study. For the current study, I have reviewed the current reserve position to assess the adequacy of the current amortization. I recommend updating the amortization amount based on the balances in the current study and amortizing the remaining reserve over a

five-year period. The five-year period is the typical period between depreciation studies and generally aligns with the remaining time of the original 10-year period authorized by PURA in the previous case. The amortization rates to be applied to plant in service for these accounts are equal to one divided by the amortization period.

Q. Please use an example to illustrate how the annual depreciation accrual rate for a particular group of property is presented in your Depreciation Study.

A. I will use Account 367.00, Underground Conductors and Devices, as an example because it is one of the largest depreciable groups. The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data were compiled from 1908 through 2025 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1908-2025 experience band and 2001-2025 experience bands are presented on pages VII-50 through VII-55 of the Depreciation Study. The life tables display the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-50 shows $13,626,715 retired at age 4.5 with $1,235,169,872 exposed to retirement. Consequently, the retirement ratio is 0.0110 ($13,626,715/$1,235,169,872) and the survivor ratio is 0.9890 (1-0.0110). The percent surviving at age 4.5 of 94.19 percent is multiplied by the survivor ratio of 0.9890 to derive the percent surviving at age 5.5 of 93.15 percent. This process continues for the remaining age intervals for which plant was exposed to retirement during the period 1908-2025. The resultant life tables, or original survivor curves, are plotted along with the estimated smooth survivor curve, the 50-R0.5 on page VII-49.

The experienced net salvage percentages are presented on pages VIII-12 and VIII-13 of the Depreciation Study. The percentages are based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1999 through 2025. The 27-year period experienced negative $126,162,293 ($149,203 - $126,311,496) in net salvage for $267,745,308 plant retired. The result is net salvage of negative 47 percent ($126,162,293/$267,745,308). The most recent five-year average is negative 38 percent. Therefore, based on the statistics for this account, the three-year rolling averages, the trend in recent years, as well as the estimates of other electric companies, the recommended net salvage for services is negative 40 percent.

The calculation of the annual depreciation related to original cost of Account 367.00, Underground Conductors and Devices as of December 31, 2025, is presented on pages IX-28 through IX-30 of the Depreciation Study. The calculation is based on the 50-R0.5 survivor curve, the negative net salvage of 40 percent, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to the table on page VI-4.

V. RESULTS OF THE STUDY

Q. What is the impact of the depreciation rates recommended in the Depreciation Study?

A. Exhibit CLP-DEPRECIATION-4 sets forth the proposed versus current depreciation expense as of December 31, 2025, for the Company. The overall change reflected in

the Depreciation Study is an increase of $89,921,754, or 35.39 percent. The recommended depreciation rates incorporate the additional data available in the time since the Company's previous depreciation study in Docket No. 17-10-46.

Q. What are the primary factors causing the change in depreciation expense as a result of the Depreciation Study?

A. The primary factors are the estimates resulting from the study, which are based on updated data and information not available for the previous depreciation study, as well as the impact of past lower depreciation rates on the remaining life depreciation rates. Overall, the service lives recommended in this depreciation study are shorter than those used by the Company in the current depreciation rates, which were based on a settlement agreement adopted in Docket No. 17-10-46. Similarly, the net salvage estimates are more negative than those in the previous depreciation study for several accounts. These changes, combined with the overall reserve position resulting from the Company's use of the current depreciation rates, as adopted, results in the increase in depreciation expense needed to better align depreciation with the service lives and net salvage of the Company's assets.

Q. Does this conclude your direct testimony?

A. Yes.