COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC RATES, ANDAPPROVAL OF CERTAIN REGULATORY AND ACCOUNTING TREATMENTS	)	**CASE NO. 2025-00113**
ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES, AND APPROVAL OF CERTAIN REGULATORY AND ACCOUNTING TREATMENTS	)	**CASE NO. 2025-00114**

REBUTTAL TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

KENTUCKY UTILITIES COMPANY

AND LOUISVILLE GAS & ELECTRIC COMPANY

Filed: September 30, 2025

TABLE OF CONTENTS

PAGE

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is John J. Spanos. My business address is 300 Sterling Parkway, Mechanicsburg, Pennsylvania 17050 (formerly 207 Senate Avenue, Camp Hill, Pennsylvania 17011).

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A. Yes. I previously submitted direct testimony on behalf of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU') in May 2025.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. In my rebuttal testimony, I respond to the depreciation-related recommendations of the Office of the Attorney General ("AG") and Kentucky Industrial Utility Customers ("KIUC") witness Lane Kollen. There are two primary depreciation issues I will address. The first issue is the inclusion of terminal decommissioning costs in depreciation rates and the proper recovery of those costs. Mr. Kollen has recommended that the terminal decommissioning costs associated with each of the Companies' generating facilities be denied. The second issue is the life spans for most of the Companies' electric generating power plants. Mr. Kollen has recommended longer life spans than those I have proposed. Given the numerous factors influencing the economics of operating electric generation facilities, his proposals to extend the life spans for these facilities are not appropriate or reasonable. In addition, Mr. Kollen also recommends that if the Commission determines the Companies are allowed to recover the terminal decommissioning costs associated with retiring generating facilities, these costs should be recovered after the facilities have been retired and no longer provide service. Thus, future rate payers should be required to pay these costs as a "separate standalone expense."[1] Mr. Kollen continues his argument stating terminal decommissioning costs should be treated as "a transition cost to the newer, more efficient, and lower cost replacement generation and appropriately recovered from the customers who benefit from the new replacement generation." This proposal is inappropriate as it is inconsistent with GAAP and regulatory principles and will result in intergenerational inequity. I will conclude my rebuttal testimony by discussing Mr. Kollen's comments regarding the support and development of depreciation rates for future assets.

II. DEPRECIATION CONCEPTS AND INTERGENERATIONAL EQUITY

Q. WHAT IS DEPRECIATION?

A. Depreciation is defined in the FERC Uniform System of Accounts ("USofA"):

> 12. *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.

[1] AG-KIUC Direct Testimony, p. 76, line 10.

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. The USofA requires this in General Instruction 22-A:

> *Method*. Utilities must use a method of depreciation that allocates in a systematic and rational manner the service value[2] of depreciable property over the service life of the property.

Thus, the USofA confirms that depreciation represents the allocation of the full costs of a company's assets (original cost less any net salvage) over their service lives – that is, over the period of time the assets are providing service. Costs are allocated over the service lives of the assets so that customers pay for the costs of the assets that provide them service. Current customers should not pay for the costs of assets that have already been retired or those not yet in service. Similarly, future customers should not have to pay for the costs of assets that are no longer in service because current customers pay too little for their service.

Q. WHAT IS THE DEFINITION OF SERVICE LIFE?

A. The USofA defines service life as follows:

> 36. *Service life* means the time between the date electric plant is includible in electric plant in service, or electric 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]

As discussed previously, one of the issues in this proceeding is the life spans of various generating units. Thus, the service life for an asset at these plants is the time from the

[2] The USofA defines service value as the original cost less net salvage.
[3] FERC USofA, Definition 36.

asset's installation until its retirement date. Therefore, the USofA definition requires the costs of the assets at each generating unit to be recovered through depreciation by the date of retirement which has been updated in the depreciation studies. The proposals of Mr. Kollen – whether to deny the terminal decommissioning costs associated with the retirement of each generating facility or to use longer lives will not achieve this objective and will instead recover costs after the Companies plants are retired.

Q. WHAT IS THE CONCEPT OF "INTERGENERATIONAL EQUITY"?

A. Intergenerational equity is a ratemaking principle in which customers receiving the benefit from the use of an asset (e.g., from electric utility property used to provide electric service) are the same customers who pay the cost of that asset. There are actually two related concepts when considering intergenerational equity as it pertains to depreciation. The first is the inequity that results from a situation in which customers pay for assets from which they receive no service. For example, if a power plant is retired before becoming fully depreciated, then customers subsequent to the retirement will have to pay for an asset from which they are not receiving service. This is inequitable, as one generation of customers bears the cost of an asset from which they receive no service (and that provided service to an earlier generation). The second concept is instead related to the distribution of depreciation charges over the life of an asset. For example, if depreciation expense is higher in the earlier years of an asset's life and lower in later years (or vice versa), this could also be considered inequitable because one generation of customers pay a higher share than a different generation.

In my view, the first concept related to intergenerational equity is more harmful to customers than the second. That is, there is a greater degree of inequity that results from a customer paying for an asset that only provided service to other generations of customers – and not to him or her – than results from one generation paying somewhat more or less than a previous generation for the same asset. Additionally, I would add that depreciation is necessarily a forecast of future events (such as the actual retirement date of a power plant) that will occur many years in the future. It is therefore nearly impossible to perfectly allocate costs equally over the lives of a utility company's entire asset base.

III. THE LIFE SPAN METHOD

Q. PLEASE EXPLAIN THE CONCEPT OF A "LIFE SPAN."

A. For certain types of facilities, referred to as "life span property," all assets at the facility will be retired concurrently. A textbook example of a life span property is a power plant. When the plant is retired, all assets at the plant will be retired (whether installed the day the plant went into service or were placed into service recently). The retirement of the entire facility is referred to as the "final retirement" or "terminal retirement." The period of time from the original year the plant was placed into service to the final retirement is the "life span" of the facility.

Not all assets at a facility will be retired as final retirements. Some components of life span property will be replaced during the life span of the overall facility. When such assets are retired or replaced, they are referred to as "interim retirements." New assets installed subsequent to the original installation of the facility up to the date of final retirement are referred to as "interim additions." Interim retirements need not be minor items. For example, a utility will replace boiler feed pumps at its coal-fired power plants prior to the final retirement of the facilities. The retired feed pumps will be interim retirements and the new boiler feed pumps that replace the retired pumps will be interim additions.

Q. HOW IS DEPRECIATION DETERMINED FOR LIFE SPAN PROPERTY IN ORDER TO MEET THE OBJECTIVE OF DEPRECIATION YOU SET FORTH ABOVE?

A. The life span method allows for costs to be equitably allocated over the life span of the facility as well as over the lives of interim retirements. When the life span method is used, a probable retirement date is estimated[4]. The probable retirement date represents the point in time in the future when it is most probable that the life span facility will be retired. The use of a probable retirement date allows depreciation to be calculated so that each vintage of assets at the facility will be depreciated by the time of the estimated retirement date. As a result, both the original installation and interim additions that have occurred to date are recovered over the appropriate period of time.

The life span method also allows for the estimation of interim retirements. This is most commonly achieved with the use of "interim survivor curves," which estimate what percentage of plant will be retired each year. However, in some instances, such as interim retirements of larger assets such as ash ponds, it is necessary to separately identify large interim retirements and depreciate these assets over their expected useful life.

[4] NARUC, *Public Utility Depreciation Practices*, 1996, p. 141.

IV. LIFE SPANS OF POWER PLANTS

Q. WHAT HAVE YOU PROPOSED FOR THE LIFE SPANS OF THE COMPANIES' POWER PLANTS?

A. For the Companies' power plants, the life spans I have proposed are consistent with the life spans used for the Companies' current depreciation rates, with the exception of Brown Unit 3. The Kentucky Utilities Company Depreciation Study reflects the changed expectations for Brown Unit 3 to remain in service through 2035.

Q. HOW ARE LIFE SPANS TYPICALLY ESTIMATED?

A. A power plant is typically retired as the result of an economic decision. As a plant ages and becomes more expensive to operate, and as new technologies become more efficient and economical relative to existing generation, it eventually becomes economical to replace the existing plant. Also, in many cases there are environmental regulations that determine the retirement date. The retired plant may be able to physically operate for a longer period of time but it would be a more costly option to keep the plant in service.

Thus, the process of estimating the life spans of a utility's power plants is more than determining how long a plant could physically last. It must also consider the economic decision as to when to replace the plant with newer generation. Factors considered in determining life span estimates include the life spans and experience of other similar facilities for the Company and others in the industry; an understanding of technological, regulatory and operational changes that could impact the life of a facility; and an understanding of other factors that impact the economics of operating a facility, such as fuel prices for both the plant at issue and for competing sources of generation.

Q. IN ESTIMATING THE LIFE SPANS FOR LG&E AND KU'S FACILITIES, WERE THESE TYPES OF FACTORS CONSIDERED?

A. Yes. The estimation of life spans for the Company's facilities incorporated these types of factors. The Companies performed their own analyses of the most appropriate life span for each facility. The Companies have established the probable retirement of these facilities which align with the proposed retirement dates in the depreciation study. I also performed an independent review based on my experience and knowledge of other facilities in the industry. In my judgment, the recommended probable retirement dates in the depreciation studies represent the most reasonable probable retirement dates for each facility.

It would not be appropriate to extend the life spans of any of the Companies' generating facilities as proposed by witness Kollen. Extending the lives, not only creates economic and efficiency concerns but would create operational challenges at the locations with multiple units where many assets are common such as Ghent 1 and 2.

Q. WHAT HAS MR. KOLLEN PROPOSED FOR THE LIFE SPANS OF THE COMPANIES' POWER PLANTS?

A. Mr. Kollen has proposed to increase the life spans for many of the Companies' generating facilities from those recommended in the Depreciation Studies. Mr. Kollen disregards Company specific information related to the retirement of power plants and proposes to extend the life spans of most of the Companies' generating units.

Q. WHAT IS THE BASIS OF MR. KOLLEN'S PROPOSALS?

A. Mr. Kollen is arguing the Companies' proposed life spans are "not consistent or rationalized or are unduly short."[5] Mr. Kollen is now proposing the life spans of the Companies' coal-fired assets should be "consistent and rationalized for depreciation rate and expense purposes."[6] Mr. Kollen appears to be of the opinion that the varying run cycles, inconsistent wear and tear, inefficiencies and operating costs unique to each of the coal-fired units should be ignored, and the life spans of coal-fired generating units should instead be based only on the consistency that coal-fired units constructed at the same site during the same general time frame should have the same life span. If the history of coal-fired generating units in the United States has displayed one thing, it is that Mr. Kollen's "consistency theory" cannot be applied. The basis for Mr. Kollen's proposals is certainly not "consistent" or rational and appears to only be to reduce depreciation expense. Additionally, he proposes changes for the Ghent units to have a consistent life span but does not do the same with other locations such as Mill Creek[7]. Supporting the concept that his concepts are all arbitrary. Mr. Kollen goes onto propose an arbitrary 5-year life span extension for most of the Companies' existing gas-fired combined cycle and combustion turbine generating units. The only support provided for this aspect of his proposal is to be consistent with his proposal of a 45-year life span for a combined cycle unit yet to be constructed. And lastly, Mr. Kollen arbitrarily proposes to extend the life spans associated with all of the Companies' existing Solar generation facilities an additional 5 years. Mr. Kollen's only support for this proposal is to be consistent with the life spans of solar facilities proposed to be constructed in the future.

[5] AG-KIUC Direct Testimony, p. 70, line 12.
[6] AG-KIUC Direct Testimony, p. 74, lines 3-4
[7] It appears Mr. Kollen extended the life span of Ghent 3 and Ghent 3 Scrubber for Account 312 to 3 years instead of 4 years.

Mr. Kollen's proposals related to the life spans of solar generating stations applies no consideration of the evolving technologies, designs or differences in the assets associated with the Companies' existing solar generating facilities and those planned for the future.

Q. HAS MR. KOLLEN ADDRESSED THE DECOMMISSIONING COST COMPONENT IN HIS ANALYSIS WHEN CHANGING THE LIFE SPAN DATE?

A. No. The decommissioning cost component in the depreciation studies is based on the date of retirement established in the studies; therefore, if Mr. Kollen changes or lengthens the life span date then the cost to decommission will be higher given the later date of retirement. He has not reflected these changes in any of his scenarios for recovery of decommissioning costs which again just magnifies the burden being put on future ratepayers that will not receive any benefit of the facilities.

Q. IS IT REASONABLE TO EXPECT THE LIFE SPANS OF THE COMPANIES' COAL PLANTS TO CHANGE OVER TIME?

A. Yes. In my judgment, particularly based on the experience of both LG&E and KU as well as others in the industry, it is not only appropriate to revise the life spans of the Company's coal plants, but it is also consistent with the experience of other utilities. Across the country, many coal plants have been retired earlier than expected and many have had shorter life spans than currently approved. Indeed, this can be seen in the Companies' experience. Since 2015, the Companies have retired multiple coal units including Brown Units 1 and 2 in 2019 and Cane Run Units 4, 5 and 6 in 2015. The Company also retired the Pineville plant in 2002, Tyrone units in 2007 and 2013, Green

River units in 2003 and 2015, and Cane Run Units 1, 2 and 3 in 1985. Most of these had a life span of less than 60 years, as can be seen in the table below.

Table 1: Life Spans of Retired or Planned to Be Retired LG&E and KU Coal-Fired Power Plants

Unit	In-Service Year	Retirement Year*	Life Span
Cane Run Unit 1	1954	1985	31
Cane Run Unit 2	1956	1985	29
Cane Run Unit 3	1958	1985	27
Pineville	1951	2002	51
Green River Unit 1	1950	2003	53
Green River Unit 2	1950	2003	53
Tyrone Unit 1	1947	2007	60
Tyrone Unit 2	1948	2007	59
Tyrone Unit 3	1953	2013	60
Cane Run Unit 4	1962	2015	53
Cane Run Unit 5	1966	2015	49
Cane Run Unit 6	1969	2015	46
Green River Unit 3	1954	2015	61
Green River Unit 4	1959	2015	56
Brown Unit 1	1956	2019	63
Brown Unit 2	1963	2019	56

*Retirement year represents the year unit no longer was generating electricity. This is not the same date assets were removed from service as shown in the depreciation study.

As can be seen in the table, the plants that the Company has retired have had shorter life spans or comparable life spans for the facilities that are at issue in this case. Further, the average life span of these retired plants was approximately 50 years, which is even shorter than the life spans I have proposed for most of the Company's remaining coal-fired power plants and specifically Mill Creek Unit 1, Mill Creek Unit 2 and Brown Unit 3. Additionally, while some of the older plants have had longer life spans, the Company's newer plants have tended to have shorter experienced life spans, which is consistent with the experience of many in the industry. For example, all of the plants in the table above that were installed since 1960 have had life spans less than 60 years.

The shorter life spans for plants built over the last 40 years is due to many additional factors, such as the influx of renewable energy sources, lower natural gas prices, environmental regulations and efficiencies of coal. In fact, over the last 5 – 7 years, the average age of generating facilities that have been retired has been less than 50 years.

Q. HAS MR. KOLLEN PREVIOUSLY TAKEN THE POSITION IN OTHER CASES WITHIN KENTUCKY THAT RETIREMENT DATES SHOULD NOT CHANGE WITHOUT ESTABLISHING A FORMAL RETIREMENT DATE COMMITMENT?

A. Yes. It appears Mr. Kollen does not have a basis or proper support for his determination of probable retirement dates or life spans for generating facilities.

Q. WHY HAVE NEWER COAL-FIRED POWER PLANTS TENDED TO HAVE MORE RAPIDLY CHANGING CIRCUMSTANCES THAN OLDER PLANTS?

A. As I noted above, three of the primary factors that have resulted in the retirement of coal-fired power plants have been new technologies of generation (both efficient gas combined cycle plants and renewables), low fuel prices for natural gas generation and environmental regulations. The impact of these factors on existing coal-fired generation became significant in the mid-to-late 2000s, whereas these factors did not have as much of an impact prior to this time period. Thus, a power plant installed in the 1940s would have been in service for 60 years or more before these factors began to significantly impact the economics of the plant. This allowed older plants to attain longer life spans. However, a plant placed in service in the 1970s or 1980s would be much younger (20 or

30 years of age) in the mid-to-late 2000s, which has tended to, on average, result in shorter life spans for newer coal-fired power plants.

Q. ARE THERE COMPARABLE EXAMPLES OF POWER PLANTS RETIRING EARLIER THAN EXPECTED IN OTHER JURISDICTIONS?

A. Yes. There are a number of examples of power plants of the same vintage as the Company's remaining fleet of coal plants that either have retired or are planned to be retired that had or will have shorter life spans than those proposed by the other parties. The Company's generating units that are at issue in this proceeding have all been installed since 1971 (Brown Unit 3 is the oldest coal-fired unit expected to remain in service beyond 2020). There have been a number of plants installed since 1971 that either have been or are planned to be retired. For example, Nevada Power has retired its Reid Gardner plant and Navajo plant (of which it is a co-owner) by the end of 2019. The life spans of the six units at these plants (each has three units) range from 37 to 48 years. Indianapolis Power & Light retired its Harding Street Station Units 1 and 2 in 2016, resulting in a 43-year life span. MidAmerican Energy closed its Neal Unit 2 plant in 2015, resulting in a life span of 43 years. Public Service Company of Oklahoma's Northeastern Unit 4 plant was retired in 2016 and had a life span of 36 years. The Saint John's River Power Park ("SJRPP") plant was retired in 2018. The two units at this plant had life spans of 30 and 31 years.

Additionally, the Boardman plant in Oregon was retired in 2020, which will result in a 40-year life span. Duke Energy Progress's Asheville plant was shut down by end of 2019, resulting in a 48-year life span. Public Service Company of Oklahoma plans to retire its Northeastern Unit 3 plant in 2026, resulting in a life span of 46 years. These are just a few examples of coal-fired units being retired consistently with the plans of the Company's generating units.

Q. CAN YOU SUMMARIZE THE FUNDAMENTAL FLAWS OF MR. KOLLEN'S DEPRECIATION POSITIONS?

A. Yes. First, Mr. Kollen does not have any basis for changing the life spans of the generating facilities as his changes are random. They are not supported by any of the key factors that need to be considered. Second, Mr. Kollen's proposals just extend the remaining lives to a longer life span without properly calculating the interim survivor curve and net salvage components in a fashion that would be consistent with depreciation concepts. A longer life span results in more interim retirements and more net salvage, which requires more depreciation expense than has been proposed. Finally, Mr. Kollen's positions on terminal net salvage directly creates intergeneration inequity and will not fully recover the full service value of generating assets. His proposals will not recover the Companies' costs over their service lives and instead will result in future customers paying the costs of assets that will have been removed from service.

V. TERMINAL NET SALVAGE FOR PRODUCTION

Q. WHAT ARE MR. KOLLEN'S OBJECTIONS TO THE TERMINAL NET SALVAGE ESTIMATES FOR THE COMPANIES' GENERATING FACILITIES?

A. Mr. Kollen has two primary objections to the development of terminal net salvage estimates in this case. First, he claims decommissioning, or terminal net salvage, should be excluded from the depreciation rate and be a standalone expense. Second, he asserts that the escalation of decommissioning costs to the date of retirement should be reduced to just the test year. Neither of these claims are correct, and Mr. Kollen provides no evidence to support their merit.

Q. DO THE COMPANY'S CURRENT DEPRECIATION RATES, APPROVED BY THE COMMISSION, INCLUDE ESCALATION?

A. Yes. The Companies' current depreciation rates approved by the Commission in Case Nos. 2020-00349 and 2020-00350 include terminal net salvage estimates calculated with a component of escalation to the date of retirement of each generating facility.

Q. WILL MR. KOLLEN'S PROPOSAL TO ELIMINATE ESCALATION PROPERLY ALLOCATE THE COMPANIES' COSTS OVER THE SERVICE LIVES OF THEIR GENERATING FACILITIES?

A. No. The decommissioning costs reflected in the Companies' proposed depreciation rates were calculated at current price level. However, the Companies' plants will not be retired for many years. The net salvage costs need to be escalated so that the correct amounts are allocated over the lives of the plants as defined by the FERC Uniform System of Accounts. Mr. Kollen's proposal to remove escalation to the date of retirement from the decommissioning costs would result in insufficient recovery of the Companies' actual costs.

Q. ARE MR. KOLLEN'S NET SALVAGE PROPOSALS BASED ON ACCEPTED DEPRECIATION PRACTICES?

A. No. It is widely accepted that depreciation should include future net salvage costs, which are recovered on a straight-line basis and that those costs should be based on the expected cost to retire the Companies' assets at the time of retirement or removal. This applies not only to decommissioning costs but to the costs of all plant assets.

Q. SHOULD NET SALVAGE BE BASED ON THE FUTURE COSTS EXPECTED TO BE INCURRED, NOT ON TODAY'S COSTS?

A. Yes. Because net salvage must be based on future costs, decommissioning costs for net salvage must also be estimates of the future cost at the time of decommissioning. For this reason, if decommissioning estimates are developed using the cost to decommission a plant today, then these costs must be escalated to the time period in which they are expected to be incurred to achieve adequate recovery.

Q. SHOULD NET SALVAGE BE RECOVERED IN TODAY'S COST (THAT IS, THE COST IN TODAY'S DOLLARS)?

A. No. In order to recover the service value of the Companies' assets, net salvage must be determined at the cost that will be incurred in the future. When using the straight-line method of depreciation, these costs are recovered ratably, or in equal amounts each year, over the life of the Companies' plants.

Q. IS RECOVERING THE FUTURE COST OF NET SALVAGE CONSISTENT WITH THE FEDERAL ENERGY REGULATORY COMMISSION'S UNIFORM SYSTEM OF ACCOUNTS (FERC USofA)?

A. Yes. The FERC USofA specifically defines net salvage as follows:

> 19. Net salvage value means the salvage value of property retired less the cost of removal.

Cost of removal is defined as:

> 10. Cost of removal means the cost of demolishing, dismantling, tearing down or otherwise removing electric plant, including the cost of transportation and handling incidental thereto. It does not include the cost of removal activities associated with asset retirement obligations that are capitalized as part of the tangible long-lived assets that give rise to the obligation. (See General Instruction 25).

Finally, cost is defined as (emphasis added):

> 9. Cost means the <u>amount of money actually paid</u> for property or services. When the consideration given is other than cash in a purchase and sale transaction, as distinguished from a transaction involving the issuance of common stock in a merger or a pooling of interest, the value of such consideration shall be determined on a cash basis.

Read together, it should be clear from these definitions that the USofA specifies cost of removal, as part of net salvage, must be recovered through depreciation expense and is the actual amount paid at the time of the transaction. Because net salvage will occur in the future, it is an estimate of the future cost that must be included in depreciation rates.

Q. DO GENERALLY ACCEPTED DEPRECIATION CONCEPTS SUPPORT THAT THE NET SALVAGE IN DEPRECIATION SHOULD BE INCLUDED AT THE COST THAT WILL BE INCURRED?

A. Yes. Including the future cost of net salvage for plant accounts is consistent with established depreciation concepts. Depreciation is a cost allocation concept, in which the full cost of an asset (original cost less net salvage) is allocated on a straight-line basis over the period of time an asset will be in service.

Q. DO ANY AUTHORITATIVE DEPRECIATION TEXTS SUPPORT THAT THE NET SALVAGE AMOUNT SHOULD REPRESENT THE FUTURE COST?

A. Yes. Two preeminent depreciation texts are the National Association of Regulatory Utility Commissioners' Public Utility Depreciation Practices (typically referred to as "NARUC") and *Depreciation Systems* by Wolf and Fitch (Wolf and Fitch). Both texts are clear that net salvage should be included in depreciation as a future cost. NARUC states the following:

> [U]nder 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 difference between the gross salvage that will be realized when the asset is disposed of and the cost of retiring it.[8] (Emphasis added)

> NARUC also explains that:

> 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 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 received.[9] (Emphasis added)

Wolf and Fitch explain that:

> The matching principle specifies that all cost incurred to produce a service should be matched against the revenue produced. Estimated future costs of retiring an asset currently in service must be accrued and allocated as part of the current expenses.[10]

Q. CAN YOU FURTHER DISCUSS WHY MR. KOLLEN'S CALCULATIONS FOR CREATING A STANDALONE TERMINAL NET SALVAGE COMPONENT ARE INAPPROPRIATE FOR ALL THE GENERATING FACILITIES?

A. Yes. First, as mentioned above, the terminal net salvage should be included in the depreciation rate based on all authoritative guidance. Second, the development of the weighted net salvage includes both interim and terminal net salvage which is based on the plant in service forecasted to be in place up to the date of retirement. Therefore, the amount that is equitably included in the depreciation rate is determined based on both the interim survivor curve and the decommissioning cost as a percentage of the assets in service each year up to the date of retirement. Thus, it is both expected and appropriate

---

8 NARUC Manual at 18.
9 NARUC Manual at 18.
10 Wolf and Fitch, p. 7.

that the decommissioning costs will increase if the original cost increases. Mr. Kollen's proposal to segregate the decommissioning expense and base it on a calculation performed at a single point in time (in this case, December 31, 2026) would significantly underestimate the full cost of decommissioning at the end of the facility's life. Not only does Mr. Kollen's proposed method of segregating decommissioning from the calculation of depreciation deviate from industry practice, but it can also lead to a departure from the matching principle that is a fundamental depreciation concept.

Q. IS THERE ANY REASON THAT DECOMMISSIONING COSTS SHOULD BE RECOVERED ANY DIFFERENTLY THAN MASS PROPERTY NET SALVAGE?

A. No. Decommissioning costs as well as the mass property net salvage (cost of removal and gross salvage) are all end of life costs. Each, by definition, are part of the recovery of the full service value of the asset over the entire life of the assets. Additionally, the percentages that are established based on informed judgment that includes statistical information and estimates of the future. Therefore, the decommissioning (terminal net salvage) component should be included in the depreciation rate just like all other net salvage percentages for each of the other asset classes.

VI. RECOVERY STANDARDS FOR GENERATING UNITS

Q. WHAT IS THE ISSUE IN THIS SECTION OF YOUR TESTIMONY?

A. In this section, I address Mr. Kollen's proposal to recover decommissioning costs for generating facilities, if allowed by the Commission, as a "standalone expense" during a period of time subsequent to the retirement of the generating facility. Mr. Kollen, even goes as far as to recommend these costs be treated as costs of transitioning to replacement generating facilities and they should be recovered as part of the replacement generating facility rather than as part of the generating facility to which they are actually associated and from which rate payer actually received service.

Q. HOW WILL YOU ADDRESS THIS ISSUE?

A. First, I will explain important depreciation concepts, and specifically explain that the goal of depreciation is to allocate the costs of the Company's assets over their service lives. I will then address specific proposals of Mr. Kollen.

Q. THE DEFINITION OF SERVICE LIFE REFERENCES THE END OF AN ASSET'S SERVICE LIFE AS THE "DATE OF ITS RETIREMENT." CAN YOU ADDRESS THE CONCEPT OF RETIREMENT FURTHER?

A. Yes. The retirement of an asset is the point in time when the asset is removed from providing service to customers. NARUC's *Public Utility Depreciation Practices* defines retirement as follows:

> Retirement: The sale, abandonment, distribution, or withdrawal of assets from service.[11]

NARUC goes on to explain that the retirement of an asset can occur due to a number of reasons (emphasis is added):

> The sole reason for concern about depreciation is that all plant devoted to the pursuit of a business enterprise will ultimately reach the end of its useful life. Several factors cause property to be retired. They include:
>
> 1. Physical Factors
>   a. Wear and Tear
>   b. Decay or deterioration
>   c. Action of the elements and accidents
> 2. Functional Factors

[11] NARUC, *Public Utility Depreciation Practices*, 1996, p. 324

a. Inadequacy
b. Obsolescence
c. Changes in the art and technology
d. Changes in demand
e. Requirements of public authorities
f. Management discretion

3. Contingent Factors
a. Casualties or disasters
b. Extraordinary obsolescence[12]

I emphasize "requirements of public authorities" because this is the factor leading to the retirement of many of the Company's units. This is a legitimate reason for retirement and should not be discounted or ignored – as other parties propose to do.

The Uniform System of Accounts has similar language in its definition of depreciation (emphasis added):

> 12. *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.

Thus, both NARUC and the USofA are clear that the requirements of public authorities are legitimate causes of retirement and must be given consideration when determining depreciation expense.

I would also like to point out that regulation is a legitimate cause of retirement, as has been the case for many units across the United States over the last eleven years or so.

Q. CAN YOU EXPLAIN WHAT "REQUIREMENTS OF PUBLIC AUTHORITIES"

[12] NARUC, *Public Utility Depreciation Practices*, 1996, p. 14-15

MEANS?

A. Yes. In both the NARUC Manual and the USofA, requirements of public authorities refer to any type of requirement from an authority such as a state, local or federal government. One example is a public highway department may require a pole to be removed from its right-of-way, which would cause a retirement of a pole. Another example is state or federal regulations that result in the retirement of a power plant.

Q. HAVE RETIREMENT DATES ALWAYS BEEN THE SAME SINCE EACH UNIT WAS CONSTRUCTED?

A. No. The probable retirement date is reviewed and often revised as new information regarding the efficiency of the unit and cost benefit of alternative generation becomes available.

Q. YOU HAVE NOTED THAT DIFFERENT LIFE SPANS HAVE BEEN USED FOR SOME UNITS IN PREVIOUS DEPRECIATION STUDIES. HOW DOES A DEPRECIATION STUDY NORMALLY ADDRESS A CHANGE IN ESTIMATE?

A. Because depreciation is based on estimates of what will happen many years into the future, sometimes those estimates end up requiring adjustment as circumstances change. This is why depreciation studies are updated based on current information and service lives can be adjusted accordingly. That is, the standard and well-established process is to simply revise the estimates and adjust depreciation to recover the full cost of the Companies' assets. This is what I have proposed and what ensures intergenerational equity and that the objective of depreciation is met.

However, this is not what Mr. Kollen has proposed. Mr. Kollen, in this case, has effectively decided to ignore the Companies' plans related to retirement dates. Instead, he has proposed that they continue to be depreciated to a date beyond the date they provide service.

Q. PLEASE ADDRESS THE ARGUMENT THAT FUTURE CUSTOMERS SHOULD PAY THE COST OF THESE UNITS?

A. The proposals of Mr. Kollen has set forth the argument that future customers should pay the decommissioning costs of generation facilities beyond their service lives. This argument is not consistent with any established regulatory concepts, and in particular is inconsistent with the objective of depreciation that I have described earlier. It is well established that customers should pay the costs of the assets used to provide service, not the costs of assets that served previous generations.

One additional concept to keep in mind when evaluating this argument set forth by Mr. Kollen is that there will be electric generation that replaces the Companies' existing generation units. Future generations of customers will pay for the costs of these power plants. Therefore, they should not be saddled with incremental costs of paying for power plants that have already been retired and from which they received no service.

Q. WHAT DO YOU CONCLUDE WITH REGARD TO THE LIFE SPANS OF THE COMPANIES' GENERATION POWER PLANTS?

A. Based on a number of factors discussed above, the life spans used in the depreciation studies are most appropriate to use for the development of depreciation rates in this proceeding.

Q. PLEASE FURTHER COMMENT ON MR. KOLLEN'S POSITION RELATED TO DEPRECIATION?

A. Mr. Kollen has proposed depreciation expense that has no basis. First, he recommends life spans for generating facilities that do not match their expected useful lives. Second, he does not calculate his overall depreciation expense including decommissioning costs. Finally, he recommends future customers should bear the decommissioning costs of exiting generating facilities once they are removed from service. These recommendations do not follow the concept of depreciation supported by all authoritative texts and requires future customers to pay for assets from which they did not receive any benefit.

VII. DEPRECIATION RATES FOR FUTURE ASSETS

Q. HAVE DEPRECIATION RATES FOR FUTURE ASSETS BEEN ESTIMATED CONSISTENTLY FOR LG&E AND KU AS HAS BEEN DONE FOR OTHER ENTITIES?

A, Yes. Future assets do not have plant balances in service, therefore, development of depreciation rates when those assets go into service will be based on informed judgment. Once the nature of the assets are known then the life and net salvage parameters established which are utilized to develop the depreciation rates when the assets go into service.

Q. WAS THERE SUPPORT PROVIDED RELATED TO THE DEVELOPMENT OF RATES FOR FUTURE ASSETS?

A. Yes. In response to data request AG-KIUC Set 2, Question 33, the life parameters, life span date and weighted net salvage were provided in the development of the footnoted rates in the Depreciation Studies. For Mill Creek Unit 5, the life span was 40 years, the interim survivor curve by account was comparable to the life estimate for the other existing assets in each account. For example, in Account 341.00, Structures and Improvements, the interim survivor curve was a 55-R3. The weighted net salvage was determined in the same fashion as all the locations with the appropriate segregation of terminal and interim retirements for the life cycle of Mill Creek Unit 5.

Q. WHY ARE THE DEPRECIATION RATES DIFFERENT FOR MILL CREEK UNIT 5 FROM THE SIMILAR CANE RUN UNIT 7?

A. Depreciation rates are developed based on the straight line, remaining life method. This means the relationship of the plant to reserve; the age of the surviving plant balance at the time of the calculation; the depreciation method and procedures; and the life and net salvage parameters will all be a factor. For Cane Run Unit 7, the initial investment went into service in 2015 and there have been subsequent additions and retirements each year as well as accumulated depreciation accumulated. For Mill Creek Unit 5, there has been no accumulated depreciation recorded so the full recovery of the investment has not started since no assets are in service. Consequently, Mr. Kollen's comparison schedule on page 84 of his testimony does not have much value nor does he appear to focus on remaining life depreciation rates.

VIII. CONCLUSION

Q. IN YOUR OPINION, ARE THE DEPRECIATION RATES SET FORTH IN YOUR DEPRECIATION STUDIES THE RATES THE KENTUCKY PUBLIC SERVICE COMMISSION SHOULD ADOPT IN THIS PROCEEDING FOR LG&E AND KU?

A. Yes, these rates appropriately reflect the rates at which the value of LG&E and KU's assets are being consumed over their useful lives. These rates are an appropriate basis for setting electric and gas rates in this matter and for the Companies to use for booking depreciation and amortization expense going forward.

Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?

A. Yes.

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA)
)
COUNTY OF CUMBERLAND)

The undersigned, **John J. Spanos**, being duly sworn, deposes and says that he is President for Gannett Fleming Valuation and Rate Consultants, LLC, that he has personal knowledge of the matters set forth in the foregoing testimony and exhibits, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John J. Spanos
John J. Spanos

Subscribed and sworn to before me, a Notary Public in and before said County and Commonwealth, this 29th day of September 2025.

Notary Public

Notary Public ID No. 1143028

My Commission Expires:

February 20, 2027

Commonwealth of Pennsylvania - Notary Seal
Cheryl Ann Rutter, Notary Public
Cumberland County
My commission expires February 20, 2027
Commission number 1143028
Member, Pennsylvania Association of Notaries