

**Errata Sheet**

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

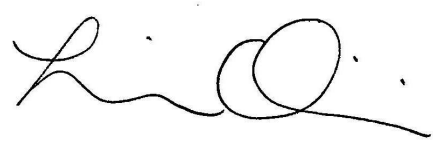
In The Matter of:

The Electronic Application of Duke Energy )  
Kentucky, Inc., for: 1) An Adjustment of the )  
Electric Rates; 2) Approval of New Tariffs; ) Case No. 2022-00372  
3) Approval of Accounting Practices to )  
Establish Regulatory Assets and Liabilities; )  
and 4) All Other Required Approvals and )  
Relief. )

FILING: Direct Testimony of Lisa M. Quilici, Filed December 1, 2022

DATE CORRECTED: May 10, 2023

<b>CORRECTION</b>	<b>LINE</b>	<b>PAGE</b>
Replace "46" with "48"	12	7
Replace "54" with "55"	1	8



Signature

**05/15/2023**  
Date

**COMMONWEALTH OF KENTUCKY**  
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In the Matter of:

The Electronic Application of Duke )  
Energy Kentucky, Inc., for: 1) An )  
Adjustment of the Electric Rates; 2) ) Case No. 2022-00372  
Approval of New Tariffs; 3) Approval of )  
Accounting Practices to Establish )  
Regulatory Assets and Liabilities; and 4) )  
All Other Required Approvals and Relief. )

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**REVISED DIRECT TESTIMONY OF**

**LISA M. QUILICI**

**ON BEHALF OF**

**DUKE ENERGY KENTUCKY, INC.**

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December 1, 2022

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**ATTACHMENT:**

Attachment LMQ-1 Resume of Lisa M. Quilici

**I. INTRODUCTION AND PURPOSE**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**  
2 **OCCUPATION.**

3 A. My name is Lisa Quilici, and I am employed by Concentric Energy Advisors, Inc.  
4 (Concentric) as a Senior Vice President. Concentric is a management consulting  
5 and economic advisory firm, focused on the North American energy and water  
6 industries. Based in Marlborough, Massachusetts and Washington, D.C.,  
7 Concentric specializes in regulatory and litigation support, financial advisory  
8 services, energy market strategies, market assessments, energy commodity  
9 contracting and procurement, economic feasibility studies, and capital market  
10 analyses. My business address is 293 Boston Post Road West, Suite 500,  
11 Marlborough, Massachusetts 01752.

12 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

13 A. I am submitting this testimony to the Kentucky Public Service Commission (the  
14 Commission) on behalf of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or  
15 the Company).

16 **Q. PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND**  
17 **UTILITY INDUSTRIES AND YOUR EDUCATIONAL AND**  
18 **PROFESSIONAL QUALIFICATIONS.**

19 A. I am among Concentric's professionals who provide expert testimony before  
20 federal, state, and Canadian provincial agencies on matters pertaining to  
21 economics, finance, and public policy in the energy industry. I am a financial and  
22 regulatory consultant with more than three decades of experience in the energy

1 industry. I advise clients throughout North America on a wide range of strategic,  
2 financial, transactional, and regulatory matters. My transactional experience  
3 includes transaction origination, due diligence, contract negotiations and execution,  
4 regulatory approvals and post-closing integration in asset-based transactions and  
5 corporate mergers and acquisitions. I have extensive experience providing Board  
6 and senior management level advisory services, strategic and financial assessments,  
7 integrated resource planning, and regulatory analysis and policy formulation. I have  
8 provided expert testimony on a range of transactional and other issues including  
9 financial fairness, regulatory compliance, financial ring-fencing and post-closing  
10 corporate governance before state regulatory agencies and courts. I am a graduate  
11 of Purdue University and was awarded an M.B.A. from Northeastern University. I  
12 am also currently enrolled in an executive education program at Harvard  
13 University. My educational and professional background is summarized more fully  
14 in Attachment LMQ-1.

15 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

16 A. The purpose of my direct testimony is to present evidence in support of the  
17 Company's recommendation to align the depreciation schedule for the East Bend  
18 Generating Station (East Bend) with its anticipated useful life to allow it to be fully  
19 depreciated and recovered through rates by its anticipated 2035 retirement. As  
20 discussed in detail below, my direct testimony supports certain recommendations  
21 and should be read in conjunction with the testimonies of Company witnesses  
22 including Scott Park, William Luke, Sarah Lawler and John Spanos.

1 **Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY**  
2 **ORGANIZED?**

3 A. The remainder of my Direct Testimony is organized as follows:

- 4 • Section II provides a summary of my testimony, including my  
5 conclusions and recommendations;
- 6 • Section III discusses trends in the retirement of coal fired generating  
7 plants nationwide;
- 8 • Section IV evaluates how the Company's proposal to align the  
9 depreciation schedule for East Bend with its service life is consistent  
10 with similar treatments of coal-fired assets approved by other  
11 regulatory commissions and discusses the benefits of the Company's  
12 proposal to its customers; and
- 13 • Section V concludes my testimony.

## II. SUMMARY OF TESTIMONY

14 **Q. PLEASE BRIEFLY SUMMARIZE THE COMPANY'S PROPOSAL**  
15 **REGARDING THE DEPRECIATION SCHEDULE FOR EAST BEND.**

16 A. As discussed in detail in the direct testimonies of Company witnesses Lawler and  
17 Spanos, the Company's current rates include depreciation expense for East Bend  
18 based on a depreciation life of 2041, however, due to prior rate case decisions,  
19 particularly the Company's most recent electric base rate case where it was not  
20 permitted to update depreciation rates, the current investment in the plant will not  
21 be fully recovered through rates by 2041. Due to changes in market conditions since  
22 the Company's last electric rate case, the Company has determined that East Bend

1 will retire in 2035. Accordingly, the depreciation schedule for East Bend should be  
2 adjusted to 2035 and not maintained for ratemaking purposes at 2041. Further, as  
3 discussed in the direct testimony of Company witness Lawler, to the extent that  
4 unrecovered plant balances exist when the plant is ultimately retired, such  
5 remaining balance should be recovered through a discrete surcharge mechanism.

6 **Q. PLEASE BRIEFLY SUMMARIZE YOUR DIRECT TESTIMONY AND**  
7 **KEY CONCLUSIONS.**

8 A. As I discuss later in my testimony, tens of thousands of megawatts (MW) of coal  
9 fired generation is expected to be retired over the next decade. Coal plant  
10 retirements are being driven by a variety of factors, including fuel costs,  
11 environmental regulations, the evolution of competing technologies providing  
12 lower cost capacity and energy options, and in some states, although not in  
13 Kentucky, renewable portfolio standards. The Company's base case scenario in its  
14 most recent integrated resource plan (IRP) calls for East Bend to be retired by 2035,  
15 which is consistent with these industry trends. Additionally, since the preparation  
16 and filing of the Company's most recent IRP, the Inflation Reduction Act further  
17 support this 2035 retirement.

18 Aligning the depreciation schedule for East Bend to 2035 is also consistent  
19 with actions taken by others in the industry. In Section IV of my testimony, I discuss  
20 examples of Commissions approving modifications to utilities' depreciation  
21 schedules to address plants that are planned to be shut down earlier than originally  
22 planned. Further, it is my understanding that the Commission has previously

1 allowed a utility to align the depreciation of an asset consistent with a shorter useful  
2 life.<sup>1</sup>

3           Aligning depreciation expense with the useful life of East Bend provides a  
4 better ratemaking result for the Company’s customers than maintaining a longer  
5 life solely for depreciation purposes. As discussed by Ms. Lawler, maintaining a  
6 2041 life for East Bend for depreciation purposes will understate the depreciation  
7 expense for the plant and create a significant unrecovered asset rate impacts for  
8 future ratepayers. This will create intergenerational equity issues by causing future  
9 customers to pay for costs that were incurred to provide service to current  
10 customers. Moreover, those future customers will be left paying for both the  
11 remaining costs of the plant no longer in service and the costs of replacing that  
12 generation to provide current reasonable, adequate and efficient service.

13           Finally, treating any unrecovered plant balances that exist when the plant is  
14 ultimately retired as a regulatory asset for future recover through a discrete  
15 mechanism is also consistent with actions taken by others in the industry. I discuss  
16 such examples in Section IV of my testimony.

17           For all of these reasons, I support and recommend the Commission approve  
18 the Company’s proposal to align the depreciation of East Bend with its 2035 end  
19 of service life.

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1 Kentucky Public Service Commission Case No. 2019-00399 Order Issued March 12, 2020.

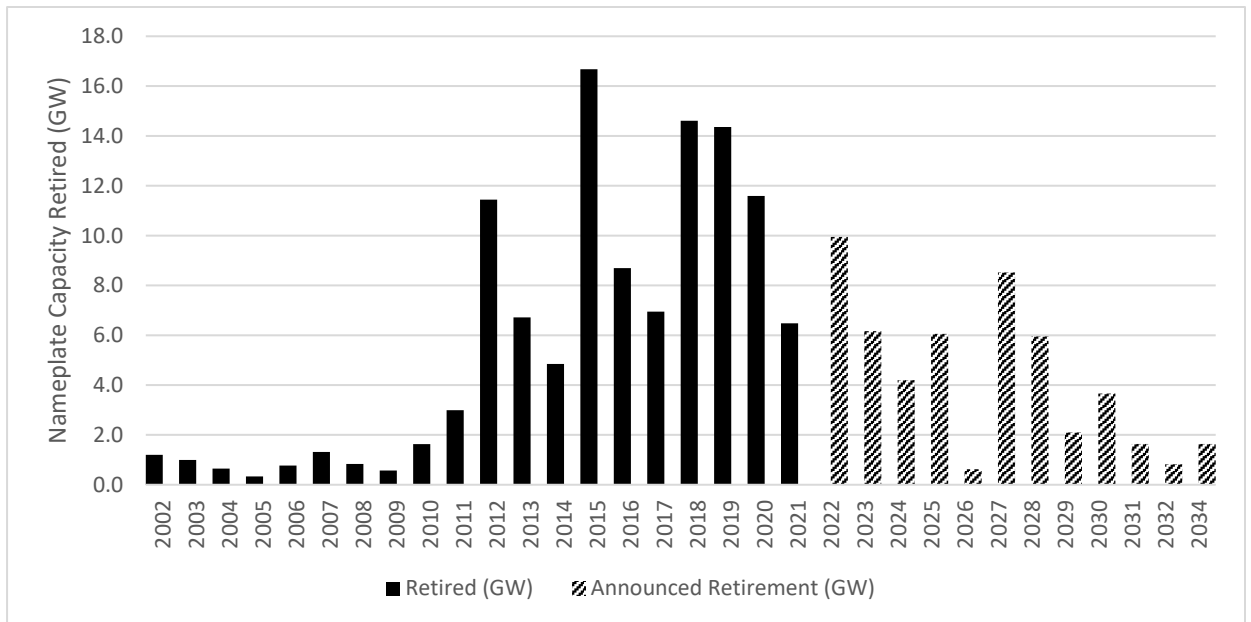


**III. INDUSTRY TRENDS AND COAL PLANT RETIREMENTS**

1 **Q. IS THE COMPANY’S PLAN TO RETIRE EAST BEND BY 2035**  
2 **CONSISTENT WITH INDUSTRY TRENDS REGARDING THE**  
3 **RETIREMENT OF COAL FIRED GENERATION?**

4 A. Yes. Substantial amounts of coal-fired generation have already been retired and  
5 more is planned to be retired over the coming decade. The U.S. Energy Information  
6 Administration (EIA) reports that since 2002, approximately 92 gigawatts (GW) of  
7 coal-fired generation has been retired in the United States, and an additional 65 GW  
8 is planned to be retired between 2022 and 2035.<sup>2</sup> No new coal plants have come  
9 online since 2013.<sup>3</sup>

**FIGURE 1: HISTORIC & PLANNED COAL RETIREMENTS IN THE U.S.**



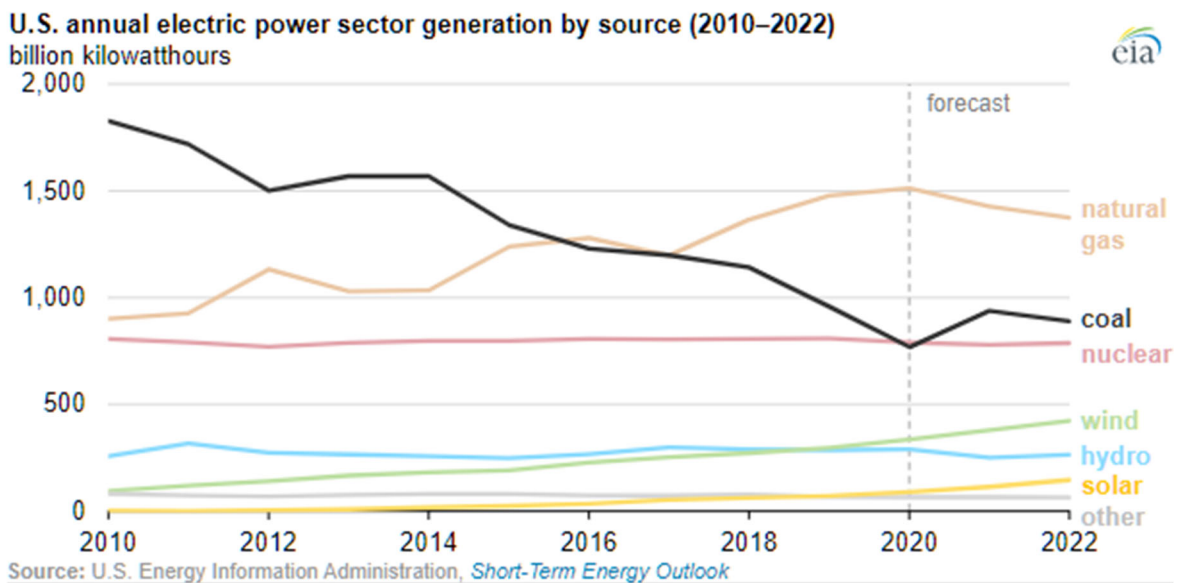
2 Data sourced from U.S. Energy Information Administration – 2021 EIA Form 860

3 U.S. Energy Information Administration, Today in Energy, October 18, 2021, U.S. Energy Information Administration - EIA - Independent Statistics and Analysis

1 **Q. HOW HAS THE NATION’S RESOURCE MIX CHANGED OVER TIME?**

2 A. As may be seen in the figure which follows, with limited exceptions, coal-fired  
3 generation has been steadily declining while natural gas and renewables have been  
4 increasing.

**FIGURE 2: U.S. ANNUAL ELECTRIC POWER SECTOR GENERATION BY SOURCE (2010-2022)**<sup>4</sup>



5

6 **Q. WHAT FACTORS HAVE CONTRIBUTED TO THE DECLINE IN COAL-**  
7 **FIRED GENERATION?**

8 A. The relative economics of coal-fired generation as compared to other generation  
9 technologies is the primary factor. These economics are influenced by fuel costs,  
10 environmental regulations, the evolution of competing technologies providing  
11 lower cost capacity and energy options, and in some states, but not in Kentucky,  
12 renewable portfolio standards. In fact, Deloitte reported in late 2021 that 4846 out

<sup>4</sup> U.S. Energy Information Administration - EIA - Independent Statistics and Analysis

1 of ~~5554~~ U.S. investor-owned utilities had committed to reduce carbon emissions.<sup>5</sup>

2 Moreover, as I explain below, Federal policy has, and will likely continue to have  
3 a significant impact on the viability of fossil generation going forward. Any further  
4 policy actions to either directly support renewable or zero emitting resources or to  
5 directly tax fossil-fueled resources, will impact the dispatchability and economics  
6 of resources like East Bend.

7 **Q. FIGURE 2, ABOVE, SHOWS AN UPTICK IN COAL IN 2021. PLEASE**  
8 **EXPLAIN.**

9 A. As reported by the EIA, rising natural gas prices in 2021 resulted in more coal-fired  
10 generation than in prior years, however that increase is not expected to continue.

11 The EIA states:

12 The electric power sector has retired about 30% of its generating  
13 capacity at coal plants since 2010, and no new coal-fired capacity  
14 has come online in the United States since 2013. In addition, coal  
15 stocks at U.S. power plants are relatively low, and production  
16 at operating coal mines has not been increasing as rapidly as the  
17 recent increase in coal demand. For 2022, we forecast that U.S. coal-  
18 fired generation will decline about 5% in response to continuing  
19 retirements of generating capacity at coal power plants and slightly  
20 lower natural gas prices.<sup>6</sup>

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5 2022 Power and Utilities Industry Outlook | Deloitte US

6 US EIA, Today in Energy, October 18, 2021, U.S. Energy Information Administration - EIA - Independent Statistics and Analysis

1 **Q. HAVE COAL PLANTS BEEN RETIRED IN KENTUCKY?**

2 A. Yes. Since 2015, more than 6,000 MW of coal-fired generation has been retired in  
3 Kentucky.<sup>7</sup> Additionally, several coal plants are projected to be retired over the next  
4 decade. For example, the third coal-fired unit of E.W. Brown Generating Station, a  
5 412-MW plant owned by Kentucky Utilities Corporation, and located in Mercer  
6 County, is set to retire in 2028. This planned retirement follows the retirements of  
7 the first two coal-fired units at the plant site in 2019.<sup>8</sup> According to EIA data, 19 of  
8 the 30 currently operating coal-fired power plant units in Kentucky began  
9 operations in 1980 or earlier, further indicating that a majority of coal power plants  
10 in the state are nearing retirement age.<sup>9</sup>

11 **Q. WILL THE RECENTLY PASSED INFLATION REDUCTION ACT**  
12 **IMPACT COAL-FIRED GENERATION?**

13 A. Yes. The Inflation Reduction Act includes billions of dollars in incentives for  
14 energy transition and carbon reduction. These incentives are largely provided in the  
15 form of new and expanded tax credits for renewable energies, carbon capture and  
16 electrification. The primary effect of the tax credits, summarized below, is to  
17 improve the relative economics of clean electricity (*e.g.*, solar and wind) thus  
18 inducing additional supply of renewable electricity generation.

19 The Inflation Reduction Act also creates a new program, the Greenhouse  
20 Gas Reduction Fund. This program will provide grants to eligible entities to: (1)

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7 Kentucky Energy and Environment Cabinet, Power Plant Retirement and Additions.

8 S&P Global Capital IQ, “Kentucky Utilities to Retire 2 Coal-Fired Units of E.W. Brown Facility”, November 14, 2017.

9 Data sourced from U.S. Energy Information Administration – 2021 EIA Form 860.

1 enable low-income and disadvantaged communities to deploy or benefit from zero-  
2 emission technologies; (2) provide financial and technical assistance to projects that  
3 reduce or avoid greenhouse gas emissions; and (3) provide financial and technical  
4 assistance to projects that reduce or avoid greenhouse gas emissions in low-income  
5 and disadvantaged communities.<sup>10</sup>

6 A clear aim of the Inflation Reduction Act is to support the development  
7 and expansion of non-carbon emitting energy sources and to accelerate the nation's  
8 energy transition.

9 **Q. PLEASE BRIEFLY DISCUSS THE TAX CREDITS FOR RENEWABLE**  
10 **ENERGIES.**

11 A. While I am not a tax professional, it is clear from a business and policy perspective  
12 that the Inflation Reduction Act provides significant tax credits for electricity  
13 generation that does not produce greenhouse gas emissions. New electricity  
14 generators can qualify for a one-time investment tax credit<sup>11</sup> or production tax  
15 credits.<sup>12</sup> Investment tax credits (ITC) are based on the amount of capital  
16 investment in a qualifying renewable energy project. The ITC can be 30% of the  
17 qualifying project cost or more, depending on which additional bonuses the  
18 generation project qualifies for. The Inflation Reduction Act expanded the  
19 eligibility for ITCs to projects that previously qualified for a reduced ITC or did

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10 Inflation Reduction Act of 2022, beginning on page 681 line 4: Sec. 60103. Greenhouse Gas Reduction Fund

11 Inflation Reduction Act of 2022, beginning on page 480 line 10: Sec. 13702. Clean Electricity Investment Credit

12 Inflation Reduction Act of 2022, beginning on page 458 line 8: Sec. 13701. Clean Electricity Production Credit

1 not qualify at all including energy storage technology and to interconnection costs  
2 incurred by certain small (under five megawatts) energy projects.<sup>13</sup>

3 Production tax credits (PTC) are based on the amount of energy generated  
4 by a renewable energy project. The Inflation Reduction Act provides for 10 years  
5 of PTCs for qualifying projects.<sup>14</sup> The per-kWh-rate of production tax credit varies  
6 based on technology (e.g., wind, geothermal). The Inflation Reduction Act tax  
7 credits phase out at the later of 2032 or when the carbon output from electricity  
8 production is equal to or less than 25% of 2022 levels.<sup>15</sup>

9 **Q. HOW MAY THE INFLATION REDUCTION ACT IMPACT COAL PLANT**  
10 **RETIREMENTS?**

11 A. As I noted earlier, a clear aim of the Inflation Reduction Act is to support the  
12 development and expansion of non-carbon emitting energy sources and to  
13 accelerate the nation’s energy transition. This will contribute to the retirements of  
14 carbon emitting power plants, including coal-fired generation. It is reasonable to  
15 expect that as a result coal plant retirements over the next decade could accelerate  
16 beyond the already planned levels.

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13 Inflation Reduction Act of 2022, beginning on page 482 line 5 and page 488 line 3: Sec. 13701. Clean Electricity Production Credit

14 Inflation Reduction Act of 2022, beginning on page 458 line 8: Sec. 13701. Clean Electricity Production Credit

15 Inflation Reduction Act of 2022, page 466 lines 5-15 and page 491 lines 14-16.

1 **Q. DO CREDIT RATING AGENCIES’ VIEW HAVING SIGNIFICANT**  
2 **COAL-FIRED GENERATION IN A UTILITY’S RESOURCE PORTFOLIO**  
3 **NEGATIVE FROM A BUSINESS RISK PERSPECTIVE?**

4 A. Yes. As discussed by Company witnesses Chris Bauer, credit rating agencies have  
5 commented on a number of utilities’ credit-negative exposure to coal. As it pertains  
6 to Duke Energy Kentucky, S&P stated:

7 In our assessment, DEK’s effective regulatory risk management is  
8 partially offset by its coal-fired generation exposure...DEK’s  
9 reliance on coal-fired generation constrains its business risk profile,  
10 which we assess as excellent, warranting our use of a negative  
11 comparable ratings analysis modifier to capture this risk.<sup>16</sup>  
12

13 Other utilities that S&P has stated as having “negative consideration” given  
14 to their credit ratings due to their coal generation ownership include Xcel Energy<sup>17</sup>,  
15 DTE Energy<sup>18</sup>, PPL Corporation<sup>19</sup>, and Southern Company<sup>20</sup>.

16 Other rating agencies have similarly opined on the risks of owning  
17 significant coal-fired generation. Fitch Ratings states that:

18 The long-term economic trend is increasingly unfavourable for the  
19 [coal power] sector in key markets...factors include rising costs for  
20 coal operators, falling utilization rates and falling unit prices for  
21 renewables – and an acceleration in retirement of coal assets in the  
22 coming years...in addition to plant closures, utility companies face  
23 costs associated with removal of hazardous waste and  
24 environmental remediation.<sup>21</sup>

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16 S&P Global Ratings, Duke Energy Kentucky Full Analysis, June 16, 2022

17 S&P Global Ratings, Xcel Energy Inc. Full Analysis, April 4, 2022

18 S&P Global Ratings, DTE Energy Co. Full Analysis, August 4, 2022

19 S&P Global Ratings, PPL Corporation Full Analysis, April 4, 2022

20 S&P Global Ratings, Southern Co. Full Analysis, August 8, 2022

21 FitchRatings, “Coal Power Phase-Out Will Front-Load Credit Impact of Asset Retirement Obligations”, June 27, 2022, at 1.

1 Moody's states similar risks for the coal-producing industry as a whole:

2 Access to capital is diminishing amid changing demographic and  
3 societal preferences – social pressure to divest coal investments or  
4 refrain from making new investments is increasingly significant for  
5 [coal] producers. Natural gas, which burns far more cleanly than  
6 coal or oil...benefits from a more favorable regulatory environment  
7 in some regions. Renewable energy, another coal competitor,  
8 benefits from government subsidies in some regions and improving  
9 economics in general. Meanwhile, social opposition makes it more  
10 difficult for public companies to own coal assets, and especially to  
11 make new investments.<sup>22</sup>

12 Major banks have expressed policies that limit their business with electric  
13 utilities that rely on coal. Barclay's announced that it will "prohibit financing to  
14 clients with more than 50% of their revenue from thermal coal as of 2020,  
15 transitioning to 30% as of 2025, and to 10% as of 2030." BNP Paribas stated that it  
16 "aims for electric utilities that it finances to stop using coal by 2030." Citigroup,  
17 Morgan Stanley, and Goldman Sachs all require more information, including  
18 strategies to diversify away from coal, from their clients.<sup>23</sup>

19 **Q. WHAT DOES THIS MEAN FOR DUKE ENERGY KENTUCKY?**

20 A. Retiring East Bend by 2035 is consistent with the industry and similar plants of  
21 similar age. Properly aligning depreciation expense with the plant's anticipated  
22 service life will ultimately benefit customers as it will mean current customers are  
23 paying the appropriate level of costs and not increasing the burden on future  
24 customers

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22 Moody's Investor Service, "Social Risks Accelerate Decline in Developed Markets as Public, Investor Concerns Mount", July 7, 2021, at 1-2.

23 Major banks announce new policies to help push utilities away from coal - Energy and Policy Institute



#### IV. EAST BEND DEPRECIATION

1 **Q. IS THE COMPANY’S PROPOSAL TO ALIGN THE DEPRECIATION**  
2 **SCHEDULE OF EAST BEND TO ITS NEW SERVICE LIFE CONSISTENT**  
3 **WITH ACTIONS TAKEN BY OTHERS IN THE INDUSTRY?**

4 A. Yes. Aligning depreciation to the actual service life of a generating asset is common  
5 practice in utility ratemaking. Additionally, there are a number of examples where  
6 utilities have actually accelerated the depreciation schedules for generating stations  
7 which they anticipated retiring earlier than provided for in their then-current  
8 depreciation schedules.

9 In its 2020 rate case, Duke Energy Indiana, LLC proposed to shorten the  
10 estimated useful lives of its Gallagher,<sup>24</sup> Cayuga,<sup>25</sup> and Gibson<sup>26</sup> generation  
11 stations’ coal-fired units from an average of 65 years to an average of 58 years. The  
12 company cited fuel costs, unit efficiency, environmental regulations, the evolution  
13 of competing technologies providing lower cost capacity and energy options, and  
14 the evolution of the regional transmission operator as among the reasons why the  
15 useful life of these units were shortened.<sup>27</sup> The Indiana Utility Regulatory  
16 Commission approved the company’s request, specifically noting that “the

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24 Gallagher is an approximately 560 MW, four-unit coal plant located in Indiana. Gallagher was placed in-service in the 1958-1961 timeframe. Two units retired in 2012. Pollution control equipment was installed on the other two units to burn low-sulfur coal. These units’ retirement dates were updated to 2022 but they were ultimately retired in 2021. Duke Energy retiring Gallagher plant earlier than expected | News | newsandtribune.com

25 Cayuga includes two coal units of approximately 1,000 MW located in Indiana. Cayuga’s commercial operation date was 1970-1972. Units 1 and 2 are equipped with scrubbers and selective catalytic reduction units. Cayuga Station - Power Plants - Duke Energy (duke-energy.com)

26 Gibson is an approximately 3,145 MW, five-unit coal plant located in Indiana. Gibson’s commercial operation date was 1976-1982. All five units have sulfur dioxide scrubbers and selective catalytic reduction units. Gibson Station - Power Plants - Duke Energy (duke-energy.com)

27 2020 WL 3630515 (Ind. U.R.C.) Cause No. 45253, Indiana Utility Regulatory Commission, June 29, 2020, Order of the Commission, at 52.

1 estimated life of generating units does significantly impact the depreciation rates in  
2 this proceeding” and finding that Duke Energy Indiana’s proposed retirement dates  
3 “are reasonable and prudent and will result in fair and reasonable rates for customer  
4 who benefit from the Company’s rate base.”<sup>28</sup> Since the issuance of this order, Duke  
5 Energy Indiana retired Gallagher and updated its IRP and has further advanced the  
6 retirement date Gibson.<sup>29</sup>

7 Idaho Power Company sought and received approval from the Idaho Public  
8 Utilities Commission to accelerate the depreciation schedule for the approximately  
9 2,400 MW four-unit coal-fired Jim Bridger Power Plant (Bridger)<sup>30</sup> to allow it to  
10 be fully depreciated and recovered by December 31, 2030. The company testified  
11 “IRP indicated that an earlier exit from coal-fired generation at Bridger would be  
12 more economical.”<sup>31</sup> The Idaho Commission found it “fair, just, and reasonable to  
13 approve the Company’s Amended Application to establish accelerated depreciation  
14 rates that fully depreciate the coal assets of Bridger by December 31, 2030.”<sup>32</sup> The  
15 company proposed to replace the base rate revenue recovery for Bridger with a  
16 levelized revenue requirement to be tracked in a balancing account.<sup>33</sup> The Idaho  
17 Commission also found it fair, just, and reasonable to approve a 1.5 percent  
18 adjustment to customer rates to recover incremental annual levelized revenue

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28 2020 WL 3630515 (Ind. U.R.C.) Cause No. 45253, Indiana Utility Regulatory Commission, June 29, 2020, Order of the Commission, at 58.

29 Duke revises Gibson Generating Station retirement dates | News | pdclarion.com

30 Bridger was placed in-service over the 1974-1979 time-period. Bridger is jointly owned by PacifiCorp (67%) and Idaho Power (33%). Units 1 and 2 are being decommissioned and converted to natural gas.

31 Idaho Public Utilities Commission Case No. IPC-E-017, Order No. 35423, June 1, 2022, at 3. 20220601Final\_Order\_No\_35423.pdf (idaho.gov)

32 Id., at 13.

33 Id., at 3.

1 requirement and to defer any unrecovered amounts shall be deferred into the  
2 balancing account for future recovery.<sup>34</sup> The Idaho Commission previously  
3 approved a settlement agreement addressing the company’s proposal to accelerate  
4 the depreciation and recover costs associated with the operation and eventual  
5 retirement of the North Valmy power plant.<sup>35, 36</sup>

6 The Public Utility Commission of Texas recently approved a settlement in  
7 a Southwestern Public Service Company rate case which specifically provided for  
8 changing and accelerating the end-of-life dates and depreciation rates for three  
9 generating stations: Tolk,<sup>37</sup> Harrington<sup>38</sup> and Plant X unit 3.<sup>39</sup> The settlement  
10 approved by the Texas Commission specified end-of-life dates that accelerated the  
11 depreciation of Tolk by 10 years, Harrington by 12-16 years, and Plant X unit 3 by  
12 two years.<sup>40</sup>

13 The Public Utility Commission of Oregon also approved a settlement which  
14 specifically provided for the anticipated early retirement of a coal plant. This  
15 settlement was approved in a Portland General Electric rate case and provided for  
16 a tariff mechanism to recover the revenue requirement effects of changing the

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34 Id., at 13-14.

35 North Valmy is a two-unit, 567-MW coal plant located in Nevada that was put in-service 1981-1985. North Valmy is jointly owned by Idaho Power and NV Energy.

36 Idaho Public Utilities Commission, Case No. IPC-E-16-24, Order No. 33771, May 31, 2017.

37 Tolk is an approximately 1,135 MW coal-fired generating plant located in Texas. The plant was commissioned in 1982.

38 Harrington is 1,080 MW coal plant located in Texas. Harrington will be converted to natural gas by Jan. 1, 2025.

39 Plant X Unit 3 is an approximately 98 MW dual-fuel (natural gas and distillate fuel oil) steam turbine located in Texas.

40 Public Utility Commission of Texas, Docket No. 51802, May 20, 2022 Order, item 693 at 11,17.

1 Boardman Power Plant’s<sup>41</sup> original assumed end of life of 2040 to 2020.<sup>42</sup> The plant  
2 was permanently closed in 2020 and demolished in 2022.

3 **Q. HAS THIS COMMISSION PREVIOUSLY APPROVED A PROPOSAL TO**  
4 **REALIGN THE DEPRECIATION OF AN ASSET WITH A REVISED**  
5 **SERVICE LIFE?**

6 A. Yes. In Case No. 2019-00399, Application of Salt River Electric Cooperative  
7 Corporation for an Order Issuing a Certificate of Public Convenience and Necessity  
8 to Construct an Advance Metering Infrastructure System (AMI) Pursuant to 807  
9 KAR 5:001 and KRS 278.020, the Commission approved Salt River’s proposal to  
10 accelerate the depreciation of TS2 meters from a 25-year depreciation rate when it  
11 installed the meters to a 15-year life. The Commission found: “The fact that the life  
12 of the exiting TS2 metering system is less than the 25-year useful life implemented  
13 when the TS2 meters were deployed warrants an adjustment to the depreciation rate  
14 in order to avoid having ratepayers bear the cost of depreciating one system that is  
15 no longer in operation at the same time as the cost of depreciating the proposed  
16 meter system.”<sup>43</sup>

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41 Boardman was a 550 MW coal-fired plant built located in Oregon.

42 Public Utility Commission of Oregon, UE 215, Order No. 10-478, December 17, 2010, at 4; Advice No. 10-04, Portland General Electric General Rate Revision, revised tariff sheets filed February 16, 2010, at 898; and Advice No. 13-03, Portland General Electric General Rate Revision UE 262, revised tariff sheets filed February 15, 2013.

43 Kentucky Public Service Commission, Case No. 019-00399, Order dated March 12, 2020, at 8.

1 **Q. IS THE COMPANY'S PROPOSAL TO RECORD AS A REGULATORY**  
2 **ASSET ANY UNRECOVERED PLANT BALANCES THAT MAY EXIST**  
3 **WHEN EAST BEND IS RETIRED AND RECOVER THEM THROUGH**  
4 **RATES CONSISTENT WITH LONGSTANDING RATEMAKING**  
5 **PRINCIPLES?**

6 A. Yes. Recovery of prudently incurred costs, and a reasonable opportunity to earn a  
7 fair return on prudent investments, is a foundational regulatory principle. The  
8 Company's proposed regulatory asset treatment of any book balances for East Bend  
9 which remain unrecovered through rates when the plant is ultimately retired is  
10 consistent with this ratemaking principle.

11 **Q. IS THE COMPANY'S PROPOSAL CONSISTENT WITH ACTIONS**  
12 **TAKEN BY OTHERS IN THE INDUSTRY?**

13 A. Yes. There are a number of examples where utilities have recorded unrecovered  
14 plant balances as regulatory assets and recovered them with carrying costs. Some  
15 regulatory commissions have taken the position to recover the regulatory asset over  
16 a number of years equal to the remaining useful life of the asset (had it remained in  
17 service) while others have approved shorter recovery periods. The precise nature of  
18 the ratemaking varies with the particular circumstances of each generating plant  
19 and company.

20 In January 2020 Duke Energy Progress retired a coal-fired power generator  
21 located near Asheville, North Carolina.<sup>44</sup> The company planned to retire the coal  
22 units to make way for a cleaner burning combined cycle gas generation station. In

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<sup>44</sup> Asheville is a two unit 414 MW nameplate capacity coal-fired generating plant.

1 2018 the company sought authorization from the North Carolina Utilities  
2 Commission to establish a regulatory asset at the time of the Asheville coal plant's  
3 retirement for the remaining net book value and any costs related to obsolete  
4 inventory, net of salvage. The company proposed to recover the remaining net book  
5 value of the coal plant over a 10-year period, meaning that the plant would not be  
6 fully recovered at the time of retirement. The commission approved both the 10-  
7 year recovery period as well as the creation of the regulatory asset.<sup>45</sup>

8 As part of a general rate case in 2021, Wisconsin Power and Light reported  
9 that it planned to retire its approximately 400 MW Edgewater 5, 550 MW Columbia  
10 Unit 1, and 550 MW Columbia Unit 2, coal plants which were planned for  
11 retirement by the end of 2022, 2023, and 2024, respectively. The company's Clean  
12 Energy Blueprint resource plan called for the retirement of the company's  
13 remaining coal-fired generating units and the replacement of that retired coal-fired  
14 capacity with new, utility-scale solar generation by the end of 2023. In a decision  
15 on a settlement of the rate case, the Wisconsin Public Service Commission  
16 approved the revenue requirements associated with recovery of the remaining net  
17 book value of Edgewater Unit 5 upon its retirement through 2045 with a return of  
18 equity of 9.8 percent on a levelized basis resulting in an effective 9.2 percent return

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45 Duke Energy Progress, Order Accepting Stipulation, Deciding Contested Issues and Granting Partial Rate Increase Docket No. E-2, Sub 1131, PDF pp. 57-58 (February 23, 2018).

1 on equity,<sup>46</sup> which represented a decrease from the 10 percent return on equity  
2 applicable to the remaining rate base.<sup>47</sup>

3 For the Colombia Units 1 and 2, the commission approved an assumption  
4 that neither of these generating units retire until the end of the 2023 test year, and  
5 that the company can defer the difference between the actual revenue requirement  
6 associated with operating and maintenance costs at those units and the amount  
7 included in the revenue requirement associated with O&M costs for those units in  
8 the 2023 test year until the next rate proceeding, with carrying costs at pretax  
9 weighted average cost of capital.<sup>48</sup>

10 As to Edgewater Unit 5, the commission found that it is reasonable for the  
11 company to transfer the remaining net book value of the coal-fired generating  
12 station upon retirement to Account 182.2 (Unrecovered Plant and Regulatory Study  
13 Costs) and to record the amortization of the remaining net book value to Account  
14 407 (Amortization of Property Losses, Unrecovered Plant and Regulatory Study  
15 Costs) and include the amortization expense in revenue requirement.<sup>49</sup> The  
16 company can continue to include the revenue requirements associated with  
17 recovery of the remaining net book value of Edgewater Unit 5 upon the retirement  
18 of the unit and reflect the unamortized balance recorded in Account 182.2 in net

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<sup>46</sup> Wisconsin Power & Light Company, 2021 WL 6125761 / 6680-UR-123, PDF p. 19 (2021) (“The Settlement Agreement includes authorization for the applicant to recover the Life NBV of Edgewater Unit 5 through June 2045 on a levelized cost recovery basis at a premised 9.80 percent ROE, which results in an effective ROE of 9.20 percent due to the specific levelized cost recovery structure. This cost recovery of the Life NBV will allow the applicant to recover a fair return on the remaining NBV for the applicant while reducing near-term revenue requirement impacts.”)

<sup>47</sup> Wisconsin Power & Light Company, 2021 WL 6125761 / 6680-UR-123, PDF p. 5 (2021).

<sup>48</sup> Wisconsin Power & Light Company, 2021 WL 6125761 / 6680-UR-123, PDF pp. 30-31 (2021).

<sup>49</sup> Wisconsin Power & Light Company, 2021 WL 6125761 / 6680-UR-123, PDF p. 29 (2021).

1 investment rate base. The company was also allowed to defer any differences in  
2 estimated and actual revenue requirements associated with retiring Edgewater Unit  
3 5 resulting from a change in the unit's September 2022 anticipated retirement date,  
4 and to segregate the remaining net book value of Edgewater Unit 5 transferred to  
5 Account 182.2 into separate projects to address the remaining net book value of the  
6 original installed cost and the costs of removal.

7 On March 19, 2018, the Florida Public Service Commission approved  
8 Florida Power & Light Company's petition for determination of need for the Dania  
9 Beach Clean Energy Center Unit 7.<sup>50</sup> The petition proposed to modernize FPL's  
10 Lauderdale Plants, by retiring Units 4 and 5 in the fourth quarter of 2018 and  
11 replacing them in mid-2022 with Unit 7. In April 2018, FPL had included in its  
12 annual Ten-Year Site Plan its plan to retire Martin Units 1 and 2 in the fourth quarter  
13 of 2018. On August 17, 2018, FPL filed another petition seeking approval to create  
14 regulatory assets and defer recovery of the amounts related to the retirement of  
15 Lauderdale Units 4 and 5 and Martin Units 1 and 2. At the time of their expected  
16 retirements, FPL stated that the total unrecovered costs for the Lauderdale Units 4  
17 and 5 and Martin Units 1 and 2 are estimated to be \$287 million and \$372 million,  
18 respectively. As proposed, the recovery of the regulatory assets would be deferred  
19 until base rates are next reset in a general base rate proceeding.

20 The company had estimated a retirement date for Lauderdale Units 4 and 5  
21 of October 1, 2018, and a retirement date for Martin Units 1 and 2 of December 31,  
22 2018. In response to Commission staff's third data request, FPL now estimates that

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<sup>50</sup> Florida Power & Light Company, 2018 WL 145224, PDF p. 13 (2018).



1 the Lauderdale and Martin Units will be retired on or about December 31, 2018. In  
2 the company's most-recent depreciation study filed in the expected retirement year  
3 for Lauderdale Units 4 and 5 is listed as 2033, and the expected retirement year for  
4 Martin Units 1 and 2 is listed as 2031.<sup>51</sup>

5 The commission found that retirement of the units would be prudent and  
6 that it was appropriate to create regulatory assets for the amounts representing the  
7 remaining net book value of the Lauderdale Units 4 and 5 and Martin Units 1 and  
8 2 at retirement. In addition, the Commission noted that the approval to record the  
9 regulatory assets for accounting purposes and would review the amounts and  
10 recovery period for reasonableness in future proceedings in which the regulatory  
11 assets are included for recovery.<sup>52</sup> On March 12, 2021, the company filed a request  
12 for a base rate increase for 2022 as part of a multi-year rate plan, which resulted in  
13 a settlement.<sup>53</sup> The agreement included the recovery of regulatory assets for the  
14 retired units,<sup>54</sup> subject to a 20-year amortization period,<sup>55</sup> and adjustment under the  
15 multi-year rate plan to credit the regulatory assets with 50% of depreciation reserve  
16 surplus.<sup>56</sup>

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<sup>51</sup> Florida Power & Light Company, 2019 WL 316219 / Docket No. 20180155-EI, PDF p. 2 (2019).

<sup>52</sup> Florida Power & Light Company, FPSC Docket No. 20180155-EI / Order No. PSC-2019-0045-PAA-EI, PDF p. 6.

<sup>53</sup> Florida Power & Light Company, FPSC Docket No. 20210015-EI / Order No. PSC-2021-0446-S-EI, PDF pp. 16-21 (December 2, 2021).

<sup>54</sup> Florida Power & Light Company, FPSC Docket No. 20210015-EI / Order No. PSC-2021-0446-S-EI, PDF p. 43 (December 2, 2021).

<sup>55</sup> Florida Power & Light Company, FPSC Docket No. 20210015-EI / Motion and Settlement, PDF pp. 1793-1794 (August 10, 2021).

<sup>56</sup> Florida Power & Light Company, FPSC Docket No. 20210015-EI / Motion and Settlement, PDF p. 5 (August 10, 2021).

1 **Q. HAS THIS COMMISSION PREVIOUSLY APPROVED PROPOSALS FOR**  
2 **REGULATORY ASSET TREATMENT OF UNRECOVERED**  
3 **INVESTMENTS?**

4 A. Kentucky Power has the Asset Transfer Ride (ATR) authorized in Kentucky Public  
5 Service Case No. 2012-00578.<sup>57</sup> Kentucky Utilities Company and Louisville Gas  
6 and Electric Company have the Retired Asset Recovery Rider (RAR) authorized in  
7 Kentucky Public Service Cases No. 2020-00349<sup>58</sup> and 2020-00350.<sup>59</sup> It is my  
8 understanding that both ATR and RAR function similarly to what the Company is  
9 proposing as discussed by Ms. Lawler.

10 **Q. THE COMPANY'S PROPOSAL TO ALIGN THE DEPRECIABLE LIFE OF**  
11 **EAST BEND WITH ITS PROJECTED SERVICE LIFE IS ONE OF THE**  
12 **DRIVERS OF THIS RATE CASE. WILL THE COMPANY'S PROPOSAL**  
13 **MITIGATE ULTIMATE RATE IMPACTS TO CUSTOMERS?**

14 A. Yes. As discussed in the direct testimony of Ms. Lawler, if the Company's proposal  
15 is not adopted and the current depreciation schedule for East Bend is maintained,  
16 approximately \$107 million of prudently incurred investments in the plant used to  
17 serve current customers will remain unrecovered in 2035 to be recovered from  
18 future customers after the plant is no longer in-service. While I understand the  
19 temptation to seek to limit the instant rate increase, disregarding the plant's  
20 shortened useful life will simply create incremental expense, and an  
21 intergenerational equity issue, for future customers. As discussed by Ms. Lawler, it

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<sup>57</sup> Kentucky Power Company, Case No. 2012-00578 (October 7, 2013) (Settlement Exhibit 1-A).

<sup>58</sup> Kentucky Utilities Company, Case No. Case No. 2020-00349, pp. 18-19 (June 30, 2021).

<sup>59</sup> Louisville Gas & Electric Company Case No. 2020-00350, p. 21 (June 30, 2021).

1 is important to match the depreciation schedule with the asset’s useful life to ensure  
2 that customers pay for the assets that serve them. Further, as I noted earlier in my  
3 testimony, the Company’s proposal supports its continued access to capital.

4 **Q. PLEASE DISCUSS THE PRINCIPLE OF INTERGENERATIONAL**  
5 **EQUITY.**

6 A. Intergenerational equity in utility cost of service ratemaking is the principle that  
7 rates should cover the costs of providing service for the time period rates will be in  
8 effect. Modifying an asset’s depreciation schedule to match updates to its  
9 anticipated useful life supports this principle such that customers who benefit from  
10 the investment, pay for the investment. If the Company’s proposal to align East  
11 Bend’s depreciation with its service life is denied, future customers will be  
12 responsible for approximately \$107 million of costs incurred to serve a prior  
13 generation of customers while also being responsible for the costs of replacing that  
14 generation to provide current reasonable, adequate and efficient service.

15 **Q. HAS THE COMMISSION CONSIDERED THE IMPORTANCE OF**  
16 **INTERGENERATIONAL EQUITY IN RATEMAKING?**

17 A. Yes. In Case No. 2017-00349, the Commission stated that: “the Commission finds  
18 the Attorney General's recommendation on the treatment of net salvage in  
19 computing Atmos's depreciation rates unreasonable in that it opposes customary  
20 depreciation conventions and creates *intergenerational inequity*, and should,  
21 therefore, be rejected.”<sup>60</sup>

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<sup>60</sup> Atmos Energy Corp., Case No. 2017-00349, p. 14 (May 3, 2018).

1           In Case No. 2019-00399, the Commission found that “acceleration of the  
2           depreciation rate is reasonable to the extent that it prevents ratepayers from bearing  
3           the cost of depreciating two-meter systems at the same time and therefore should  
4           be approved.”<sup>61</sup>

**V.     CONCLUSION**

5   **Q.     WHAT IS YOUR CONCLUSION REGARDING THE COMPANY’S**  
6   **PROPOSAL TO ADJUST THE DEPRECIATION SCHEDULE FOR EAST**  
7   **BEND TO ALLOW IT TO BE FULLY DEPRECIATED AND RECOVERED**  
8   **THROUGH RATES BY 2035?**

9   A.     The Company’s proposal is reasonable and consistent with industry trends and  
10    ratemaking principles. If adopted, the Company’s proposal will support a better  
11    outcome for its customers than disregarding the likely retirement date of the plant.  
12    I respectfully recommend the Commission approve the Company’s proposal to  
13    adjust the depreciation schedule for East Bend to 2035.

14   **Q.     WHAT IS YOUR CONCLUSION REGARDING THE COMPANY’S**  
15   **PROPOSAL TO TREAT ANY UNRECOVERED PLANT BALANCES**  
16   **THAT EXIST WHEN THE PLANT IS ULTIMATELY RETIRED AS A**  
17   **REGULATORY ASSET?**

18   A.     This proposal is also reasonable and consistent with industry trends and ratemaking  
19    principles. I respectfully recommend the Commission approve the Company’s  
20    proposal to treat any unrecovered plant balances that exist when the plant is  
21    ultimately retired as a regulatory asset.

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61 Salt River Electric Cooperative Corp., Case No. 2019-00399, p. 8 (March 12, 2020).

1 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

2 A. Yes, it does.

