

Exhibit No. 114

Evergy Missouri West – Exhibit 114
Larry Kennedy
Direct Testimony
File Nos. ER-2022-0129 & ER-2022-0130

Exhibit No.
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Case No. ER-2022-0130
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2022-0130

DIRECT TESTIMONY

OF

LARRY KENNEDY

ON BEHALF OF

EVERGY MISSOURI WEST, INC.

**Kansas City, Missouri
January 2022**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	EXECUTIVE SUMMARY	4
III.	KEY ISSUES	6
IV.	IMPACT OF DECARBONIZATION INITIATIVES ON THE RETIREMENT OF COAL FIRED GENERATION PLANTS.	8
V.	PRUDENCE OF THE RETIREMENT OF THE SIBLEY PLANT	11
VI.	RATEMAKING TREATMENT OF SIBLEY AAO	31
VII.	FUTURE REMOVAL OF ELECTRIC GENERATION ASSETS: THE PROACTIVE COLLECTION OF THE REQUIRED CAPITAL COSTS	37
VIII.	SUMMARY OF RECOMMENDATIONS	42

DIRECT TESTIMONY
OF
LARRY KENNEDY
Case No. ER-2022-0130

1 I. **INTRODUCTION**

2 **Q: Please state your name and business address.**

3 A: My name is Larry Kennedy. My business address is 200 Rivercrest Drive
4 SE, Suite 277, Calgary, Alberta, T2C 2X5.

5 **Q: By whom are you employed and in what capacity?**

6 A: I am employed by Concentric Energy Advisors as a Senior Vice President.

7 **Q: On whose behalf are you submitting this Direct Testimony?**

8 A: I am submitting this Direct Testimony to the Missouri Public Service
9 Commission on behalf of Evergy Missouri West, Inc., d/b/a Evergy Missouri
10 West (“Evergy Missouri West” or “Company”).

11 **Q: Please describe your qualifications.**

12 A: I have been employed in the public utility sector in the specialized fields of
13 regulated plant accounting, capital recovery and development of
14 depreciation and capital recovery strategies for over 40 years. I have spent
15 the last 22 years in a consulting role and have provided testimony in over
16 100 proceedings on the topics of depreciation, regulatory plant accounting,
17 GAAP accounting related to regulated entities, and stranded cost issues,
18 including Testimony before the Missouri Public Service Commission (the

1 “Commission”) on behalf of Missouri-American Water Company.¹
2 Additionally, I am a Certified Depreciation Professional and a member of the
3 teaching faculty of the Society of Depreciation Professionals. I have
4 presented extensively on the topics of depreciation, utility asset valuation
5 and stranded cost. My resume and list of testimony are provided as attached
6 in Schedule LK-1.

7 **Q: What is the purpose of your Testimony?**

8 A: My testimony provides my analysis and recommendations relating to two
9 separate and distinct topics. First, I address the prudence of the 2018
10 retirement of the Sibley coal fired generation plant (“Sibley”). In this regard,
11 I discuss the Commission’s decision granting an accounting authority order
12 (“AAO”) in its Report and Order (“Report and Order”) in Office of Public
13 Counsel v. KCP&L Greater Mo. Operations Co., No. EC-2019-0200 (Oct.
14 17, 2019) (“AAO Case”), which directed Evergy Missouri West to establish
15 a regulatory liability related to the retirement of the Sibley units in November
16 2018. This testimony will specifically address the fair and appropriate
17 disposition of the regulatory liability associated with the Sibley retirement.

18 Second, I discuss the inclusion of prospective final retirement
19 decommissioning estimates into depreciation rate calculations, in order to

¹ Case No. WR-2020-0344/-0345, Direct and Surrebuttal Testimony of Larry E Kennedy.

1 provide the appropriate recovery of all costs related to Sibley over the useful
2 life of the plant.

3 **Q: How is the remainder of your Testimony organized?**

4 A: My testimony is organized as follows:

- 5 1. Section 2 of my Testimony provides a brief executive summary
6 including the reasons supporting my opinion that the decision to
7 retire Sibley was prudent;
- 8 2. Section 3 of my Testimony discusses the Key Issues that the
9 Commission will consider in this Proceeding;
- 10 3. Section 4 discusses both the impact of Missouri and national
11 initiatives on the retirement of electric coal fired generation plants;
- 12 4. Section 5 discusses the prudence of the decision to retire the
13 Sibley plant;
- 14 5. Section 6 highlights the background on the establishment of the
15 AAO leading to the setting up of the regulatory liability account
16 that has been accumulating the costs currently being collected in
17 the revenue requirement related to the retired Sibley plant. This
18 section also provides a discussion of the costs that have been
19 accumulated in the regulatory liability account, and my
20 recommendations regarding these accumulated costs;
- 21 6. Section 7 provides a discussion of the reasonableness of
22 developing a fund for the proactive collection of the required
23 capital costs for the future removal of electric generation assets;
24 and
- 25 7. Finally, in Section 8 I summarize my conclusions and
26 recommendations.

1 **II. EXECUTIVE SUMMARY**

2 **Q: Please summarize your conclusions and recommendations.**

3 A: The decision to retire the Sibley plant was prudent. Evergy Missouri West
4 had planned to retire the plant for several years and announced in 2015 that
5 Sibley Units 1 and 2 would be retired by the end of 2019. In June 2017 the
6 Company announced that all three Sibley units would retire by December
7 31, 2018.²

8 The retirement of the Sibley plant in late 2018 was simply part of an
9 orderly process of planned coal plant retirements that began when Evergy
10 Missouri West's affiliate Evergy Metro, Inc. (formerly known as Kansas City
11 Power & Light Company) retired Montrose Unit 1 in April 2016. Coal plant
12 retirements have been planned by Missouri utilities for a number of years
13 and have been included in the integrated resource plans ("IRPs") of the
14 Evergy utilities, Empire District Electric Company/Liberty Utilities, and
15 Ameren Missouri. In addition to the 2018 retirement of the Sibley plant, other
16 retirements include Montrose Units 2 and 3 (retired in December 2018),
17 Asbury (retired in March 2020), the four units at the Meramec plant (to be
18 retired in December 2022), and the Sioux plants by the end of 2028.³
19 Additionally, Ameren recently announced an intention to pursue plans to
20 facilitate the accelerated retirement of the coal-fired Rush Island Energy

² As discussed in detail in the Direct Testimony of Company witness Darrin Ives, on June 2, 2017, the Company announced several coal plant retirements including Sibley Units 1, 2 and 3. Additionally in April 2018 EMW filed its 2018 IRP which indicated its Preferred Plan for the retirement of Sibley 2 and 3 by 2019.

³ 2021 Integrated Resource Plan Update, Ameren Missouri, page 29.

1 Center (as discussed later in this testimony).

2 Consistent with many other states, the Commission and the Missouri
3 legislature are supportive of the retirement of economically inefficient coal
4 plants. The Commission has indicated its firm support for renewable energy
5 as a resource to provide clean energy to Missourians, and specifically
6 stated that its Sibley Report and Order establishing the AAO should not be
7 taken as an indication that the Commission will dissuade Missouri utilities
8 from retiring economically inefficient coal-fired generation plants in the
9 future.⁴ Additionally, I note near-unanimous votes by the House of
10 Representatives and the Senate on May 13, 2021 that passed House Bill
11 734 (the “Missouri Securitization Bill” now codified as Section 393.1700, et
12 seq.⁵). It became law in August 2021 and provides utilities the ability to
13 securitize the costs to retire coal fired generating plants, as well as other
14 financing tools.⁶

15 The decision to retire the Sibley plant was prudently made in
16 November 2018 and was one of a number of retirements in Missouri and
17 elsewhere in that timeframe due to the age and economic inefficiencies of
18 these plants. As a result, I recommend that the Company should receive a
19 full recovery of its capital investment in the Sibley plant. I also believe it is
20 reasonable given the facts in this case to refund the operating cost amounts

⁴ Report & Order, at 14.

⁵ All statutory citations are to the Missouri Revised Statutes (2016), as amended.

⁶ Signed by Governor Mike Parson on July 6, 2021.

1 accumulated in the regulatory liability established in the AAO to customers.

2 Finally, I recommend that the Commission provide in future
3 proceedings, within the depreciation rate calculations, a pro-active recovery
4 of the final estimated decommissioning and dismantlement costs including
5 determination that the actual decommissioning costs incurred by Evergy
6 Missouri West to retire Sibley were prudent and should be recovered. In this
7 manner, the customers that have gained the benefit of the generation plant
8 in-service will be responsible for the total service value of the asset over the
9 life of the asset consistent with how such costs are recovered in the majority
10 of jurisdictions in the United States.

11 **III. KEY ISSUES**

12 **Q: Based on your understanding, what is the Commission considering in**
13 **this rate case to determine what ratemaking treatment should be**
14 **applied to the retired Sibley plant?**

15 A: The Commission is considering:

16 (1) Whether Evergy Missouri West should recover in rates the remaining
17 unrecovered investment of the Sibley plant;

18 (2) Whether Evergy Missouri West should be allowed to earn a return
19 on the unrecovered investment;

20 (3) Whether Evergy Missouri West should refund certain operating
21 costs associated with the Sibley plant related to the period post-
22 retirement.

1 Regulatory commissions typically review retirement decisions to
2 determine whether they were prudent, considering the information available
3 to the utility at the time the decision to retire the plant was made. If the
4 retirement decision is found to be prudent, regulators have generally
5 allowed the utility to recover those costs in rates. Commissions look at
6 whether the utility's conduct was reasonable under the circumstances at the
7 time it occurred and not on the basis of hindsight. The Commission
8 recognized at pages 13-14 of its Report and Order in the AAO Case that it
9 will decide whether the retirement of Sibley was prudent in this case.

10 **Q: What are you asking the Commission to approve regarding the**
11 **recovery of the incurred and estimated costs of final**
12 **decommissioning of Sibley and of current and future electric**
13 **generation plants?**

14 A: I believe that the Commission should determine that the decommissioning
15 costs incurred and to be incurred by Evergy Missouri West to retire Sibley
16 were prudent and should be recovered.

17 Additionally, I strongly support the inclusion of an estimated
18 percentage for dismantling costs related to final retirement to be included in
19 depreciation rates. The amount of net book value at the time of the
20 retirement recognizes both the accumulated depreciation position of the
21 original cost of investment, and the accumulation of any pre-recovery of the
22 costs to retire to assets. I note that the testimony of Company witness John
23 Spanos indicates that depreciation rate calculations include provisions for

1 interim retirement activity, and in this case now include a provision for the
2 final or terminal retirement activity of the plant.⁷ Through the pre-collection
3 of these amounts, the accumulated depreciation account will build to a
4 sufficient level to absorb the final actual decommissioning costs. In this
5 manner, the net book value of the retired plant will be reduced and will
6 reduce (or eliminate) the burden to future customers.

7 **IV. IMPACT OF DECARBONIZATION INITIATIVES ON THE RETIREMENT**
8 **OF COAL FIRED GENERATION PLANTS.**

9 **Q: Was Evergy Missouri West's decision to retire the Sibley plant unusual**
10 **or unique?**

11 A: No. Over the last decade coal plant retirements have dramatically increased
12 across the country. Such retirements have already occurred and will
13 significantly increase in Missouri. Specifically, the current IRPs of Missouri
14 generation utilities indicate that at least six more coal fired units are
15 anticipated to be retired by 2028.⁸ Most recently, Ameren Missouri
16 announced on December 14, 2021, that it will pursue plans to facilitate the
17 accelerated retirement of the coal-fired Rush Island Energy Center.⁹ The
18 retirement of the Sibley plant was simply one of a series of coal generation
19 plant retirements in Missouri that began in 2016 and will continue well into

⁷ Testimony of Mr. Spanos, at 13 and 14.

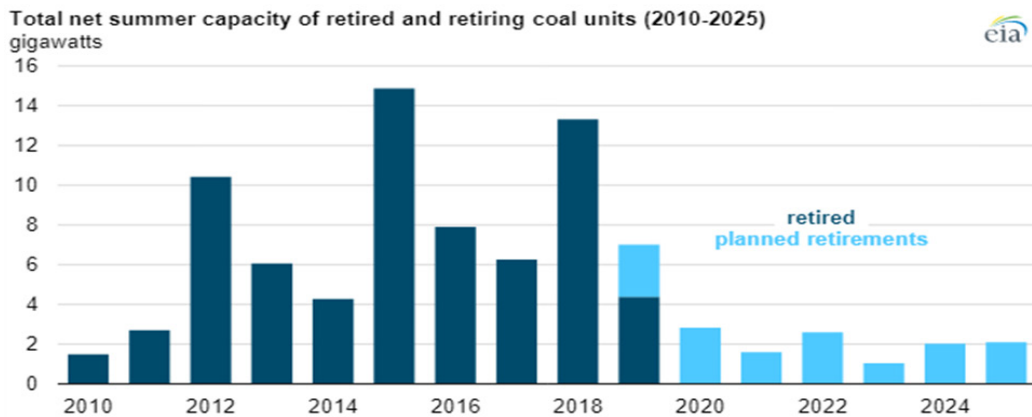
⁸ The four units of Meramec and the two Sioux units have been identified with the recent IRP filings.

⁹ Form 8-K, Ameren Corp., and Union Elec. Co. (Dec. 14, 2012).

1 this decade as a result of the economics of coal fired generation and the
2 desire of the state of Missouri to transition to renewable resources.

3 As Evergy Missouri West and its Evergy affiliates were reviewing
4 options with respect to Sibley and other coal plants, utilities throughout
5 North America were also proceeding with their programs to retire coal fired
6 generation. The following figure from the U.S. Energy Information
7 Administration shows the retirement activity for coal fired generation over
8 the period of 2010 through 2018 and forecasted activity for 2019 through
9 2025.

10 *Figure 1 – Total Summer Capacity of Retired and Retiring Coal Units 2010 - 2025*



11 Source: U.S. Energy Information Administration, Annual Electric Generator Report and
12 Preliminary Monthly Electric Generator Inventory (July 2019).
13
14

15 As noted above, between 2010 and the first quarter of 2019, U.S.
16 power companies announced the retirement of more than 546 coal-fired
17 units, totaling about 102 gigawatts (“GW”) of generating capacity. Plant
18 owners indicated that they intend to retire another 17 GW of coal-fired

1 capacity by 2025.¹⁰

2 **Q: Was Evergy Missouri West’s decision to retire the Sibley plant**
3 **consistent with government action regarding decarbonization**
4 **initiatives within the electric generation industry throughout the**
5 **United States?**

6 A: Yes. By 2018 at least seventeen state governments had either enacted
7 carbon reduction legislation or were outlining carbon reduction targets.
8 These early initiatives resulted in twelve of these states committing to
9 develop 100% renewable or clean energy goals by or before 2030. These
10 goals were established through legislation, regulation, or executive order,
11 while in other cases the targets are in statements of public policy. It was
12 clear by 2018 that the continued operation of coal fired generation had
13 become increasingly subjected to new and stricter requirements that would
14 ultimately render coal fired facilities as un-economic. Consistent with these
15 state and national trends supporting the retirement of coal generation
16 plants, on June 2, 2017 Evergy Missouri West and its affiliate Evergy Metro,
17 Inc. (then collectively referred to as “KCP&L”) announced plans to retire the
18 Montrose and Sibley Stations. In making this announcement, they noted
19 that:

20 “When these power plants started operation more than 50 years
21 ago, coal was the primary means of producing energy. Today, as
22 part of our diverse portfolio, we have cleaner ways to generate the
23 energy our customers need. After considering many options, it
24 is clear that retiring units at Montrose, Lake Road and Sibley is the

¹⁰ These retirement statistics are contained in the U.S. Energy Information Administration’s
“Today in Energy” report of July 26, 2019.

1 most cost-effective way to meet our customer's energy needs as
2 we continue to move to a more sustainable energy future."¹¹

3 Within the same announcement KCP&L stated that two of the
4 reasons for the retirements were the age of the plants and the expected
5 environmental compliance costs. As noted in the Testimony of Mr. Ives, the
6 company's Net Present Value of Revenue Requirement (NPVRR)
7 modelling determined that significant savings result from the retirement of
8 these units in all modelled scenarios.

9 At the time the decision to retire the Sibley Plant was made, many
10 states and utilities, including Evergy Missouri West and other Missouri
11 utilities, had adopted renewable energy goals. It was reasonable and
12 prudent for the Company to consider the large expenditures that would have
13 been required for Sibley to continue to operate in light of the Missouri and
14 national policies supporting decarbonization and the transition away from
15 coal fired generation.

16 **V. PRUDENCE OF THE RETIREMENT OF THE SIBLEY PLANT**

17 **Q: Please review the history of the Sibley plant and the facts that support**
18 **the retirement decision.**

19 **A:** The Sibley units were constructed by Evergy Missouri West's predecessor,
20 Missouri Public Service Company. Unit 1 was completed in June 1960 and
21 had a capacity of 48 MW. Unit 2 was completed in May 1962 with a capacity
22 of 51 MW. Finally, Unit 3 was completed in June 1969 with a capacity of

¹¹ Press Release by KCP&L dated June 2, 2017.

1 364 MW. In 1991 Missouri Public Service Company completed a major
2 renovation of Sibley to extend the life of the units and to allow them to burn
3 low sulfur western coal. Scrubbers were added to Unit 3 in 2009 to meet
4 environmental requirements to provide for the operation of the plant through
5 its expected life. It was through these capital investment programs that the
6 useful life of these units was projected to extend for close to 60 years.

7 In June 2017, Sibley Unit 1 was retired, except for its boiler. Sibley 1
8 had been slated for retirement between 2017 and 2019 according to the
9 Company's 2012 IRP which stated: "The environmental drivers that
10 contribute to the Sibley Unit 1 and 2 retirements included Mercury and Air
11 Toxics Standards Rule, Ozone National Ambient Air Quality Standards
12 (NAAQS), PM [Particulate Matter] NAAQS, Clean Water Act Section 316(a)
13 and (b), Effluent Guidelines, and Coal Combustion Residuals Rule."¹²

14 On June 2, 2017, the Company announced it planned to retire the
15 entire Sibley station by December 31, 2018, however the retirement could
16 be delayed by unforeseen circumstances such as the loss of other Evergy
17 Missouri West generating facilities. As stated in the Company's
18 announcement, the factors contributing to Sibley's retirement included: (1)
19 the reduction in wholesale electricity market prices, (2) a reduction in the
20 required reserve generating capacity, (3) a decline in near-term capacity

¹² Executive Summary, Vol. 1, KCP&L Greater Missouri Operations Company Integrated Resource Plan at 23-24 (April 2015).

1 needs, (4) the age of the Sibley plants, and (5) expected environmental
2 compliance costs.

3 On September 5, 2018, Unit 3 suffered a forced outage as a result of
4 turbine vibrations and ceased generating electricity at that time. After an
5 investigation was conducted, Evergy Missouri West decided that rather than
6 repair Unit 3 unit at an estimated cost of \$2.21 million, the Sibley station
7 would be retired on November 13, 2018, roughly six weeks prior to its
8 planned retirement date of December 31, 2018. The decision to retire the
9 unit within weeks of the planned retirement date, rather than expend \$2.1
10 million on a 50-year-old unit, was a prudent management decision, given
11 the very limited time the unit would have been in service following the repair.

12 **Q: What standard has this Commission used in deciding whether an**
13 **electric utility's decisions were prudent?**

14 **A:** For the past 35 years the Commission has applied the following standard:

15 "[T]he company's conduct should be judged by asking whether the
16 conduct was reasonable at the time, under all the circumstances,
17 considering that the company had to solve its problem prospectively
18 rather than in reliance on hindsight. In effect, our responsibility is to
19 determine how reasonable people would have performed the tasks that
20 confronted the company."¹³

21 I have been advised by Evergy Missouri West that while the burden of proof
22 rests on the utility, the Commission's practice has been to apply a
23 presumption of prudence in determining whether the expense that is
24 incurred or the decision that is made was prudent. However, if another party

¹³ Report and Order, *In re Union Elec. Co.*, No. EO-85-17, 1985 Mo. PSC LEXIS 54, *28, 27 Mo. P.S.C. (N.S.) 183, 194 (Mar. 29, 1985).

1 creates a serious doubt as to the prudence of the expense or decision, the
2 utility has the burden of dispelling these doubts and proving that the
3 expense or decision was prudent.¹⁴ This Missouri prudence test is
4 consistent with other state commission decisions that have determined
5 prudence, such as this example from Indiana:

6 "... [P]rudency is a standard by which a utility's conduct or actions are
7 evaluated. ... It is the degree of care required by the circumstances
8 under which the action or conduct is to be exercised and judged by what
9 is known, or could have reasonably been known, at the time of conduct.
10 In other words, whether an action will be considered prudent depends
11 on whether the action would be considered reasonable by a person with
12 similar skills and knowledge under similar circumstances. It is a term
13 often used interchangeably with what is considered "reasonable" under
14 the circumstances. The Commission must determine whether decisions
15 were made in a reasonable manner in light of the conditions or
16 circumstances that were known or reasonably should have been known
17 when the decision was made."¹⁵

18 At the time of the Company's announcement in June 2017 to retire
19 the Sibley plant at the end of 2018, a clear industry trend had been
20 established since at least 2012 to retire coal fired generation. Furthermore,
21 in 2017 the Company reviewed and undertook an NPVRR analysis of the
22 various IRP scenarios which concluded that the retirement of Sibley Unit 3
23 resulted in the least cost to customers. The decision reached by Evergy
24 Missouri West to retire the Sibley plant was consistent with its announced
25 plans, was consistent with utilities retiring coal fired generation plants in
26 Missouri and across the United States, and resulted in the lowest cost to
27 customers to achieve cleaner energy generation. In my view, the retirement

¹⁴ Id., 1985 Mo. PSC LEXIS 54, *25, 27 Mo. P.S.C. (N.S.) 183, *192-93.

¹⁵ Order, In re Duke Energy Indiana, Inc., Cause No.43114 IGCC 4 SI, 2012 Ind. PUC LEXIS 411 *328-29 (Ind. Util. Reg. Comm'n, Dec. 27, 2012).

1 of the Sibley plant was made in a reasonable manner in light of the
2 conditions or circumstances that were known when the decision was made.
3 As such, the retirement of the Sibley plant passes the Commission's
4 prudence test.

5 **Q: What did the Commission say in the AAO Case regarding Evergy**
6 **Missouri West's decision to retire Sibley and a future rate case that**
7 **would consider the costs associated with that decision?**

8 A: The Commission's order stated: "GMO [Evergy Missouri West's
9 predecessor] chose to close the Sibley units, and the prudence of that
10 decision is not at issue in this case. The question of prudence will be
11 addressed in a future rate case."¹⁶

12 The order additionally provided:

13 "The Commission also emphasizes that its decision to grant this
14 AAO does not mean the Commission is wavering in its support for
15 renewable energy. On the contrary, the State of Missouri, and this
16 Commission in particular, firmly support the expansion of
17 renewable energy as a resource to provide clean energy to
18 Missourians. Furthermore, this decision should not be taken as an
19 indication that the Commission will dissuade Missouri utilities from
20 retiring economically inefficient coal-fired generation plans in the
21 future. Rather, this decision is based solely on the Commission's
22 consideration of the particular circumstances of this case."¹⁷

23 In this regard, the Commission's determination that the Sibley
24 retirement was "extraordinary" under its application of General Instruction 7
25 ("Extraordinary Items") of FERC's Uniform System of Accounts ("USoA"),
26 18 C.F.R. Part 101 criteria, was for the purpose of granting the AAO and

¹⁶ Report and Order at 14, AAO Case.

¹⁷ Ibid.

1 ordering that a regulatory liability be recorded in Account 254 for the
2 revenue received to recover the cost of operations and the return on the
3 Sibley investments being collected in rates.

4 The Report and Order addresses only the deferral of amounts
5 included in rates until new rates are set that reflect the retirement of Sibley.
6 It does not address the recovery of the deferral, and it does not address the
7 prudence of the decision to retire Sibley, the recovery of the net
8 unrecovered investment in Sibley post-retirement, or the recovery of
9 prudently incurred final decommissioning and dismantling costs. The
10 Commission was clear that the question of prudence would be reviewed in
11 this rate case.

12 **Q: In analyzing whether the Company’s decision to retire Sibley was**
13 **prudent, how should the Commission view its finding in the AAO case**
14 **that the retirement was an “extraordinary” item under General**
15 **Instruction 7 that justified an AAO?**

16 **A:** As the Report and Order in the AAO Case stated, a key issue in this rate
17 case is whether the decision to retire Sibley was prudent. The Commission’s
18 finding that the retirement of Sibley was extraordinary under USoA General
19 Instruction 7 criteria related solely to accounting deferral issues, not setting
20 rates. Questions regarding the recovery of the return of and the return on
21 the remaining net book value depend on the whether the decision to retire
22 Sibley was prudent. Moreover, the appropriate analysis of retirement
23 prudence consistent with industry practice and generally utilized by

1 regulatory commissions across the country is addressed through the review
2 of USoA sections other than General Instruction 7, as well as other
3 authorities.

4 **Q: Given that General Instruction 7 was used to establish the AAO, what**
5 **other guidance has been issued by FERC and other authorities**
6 **regarding the prudence of retirement decisions?**

7 A: FERC discusses the topic of whether a retirement was planned or
8 anticipated in Part 101 of the USoA. Section 182.1 addresses whether an
9 event could have been reasonably anticipated and is the relevant USoA
10 section related to the prudence of retirement decisions. Section 182.1
11 states:

12 182.1 Extraordinary property losses. A. When authorized or
13 directed by the Commission, this account shall include
14 extraordinary losses, which could not reasonably have been
15 anticipated and which are not covered by insurance or other
16 provisions, such as unforeseen damages to property. [emphasis
17 added]

18 The key component of this provision is that an extraordinary retirement is one
19 that could not have been anticipated. As discussed above and in the
20 Direct Testimony of Darrin Ives, the retirement of Sibley was clearly
21 anticipated.

1 **Q: What guidance has been issued by the National Association of**
2 **Regulatory Utility Commissioners (NARUC) regarding plant**
3 **retirements?**

4 A: Since the 1940's, NARUC has published reports and studies on important
5 depreciation issues. These efforts, spearheaded by Commissioners and
6 members of Commission staffs, resulted in the 1996 publication of a
7 comprehensive manual entitled "Public Utility Depreciation Practices."¹⁸
8 Regarding the issue of retirements, it states: "Recovery of the original cost
9 of an ordinary retirement depends upon depreciation accruals and net
10 salvage. Ordinary retirements are caused by such factors as wear and tear,
11 decay, action of the elements, inadequacy, obsolescence, changes in the
12 art, and changes in demand."¹⁹

13 **Q: What do the terms "changes in the art" and "changes in demand"**
14 **mean?**

15 A: They refer to changes that occur as a result of social trends, economic
16 conditions, technological advancements, and other scientific improvements.
17 This is confirmed by the Depreciation Manual's glossary which contains a
18 contrasting description of an "extraordinary retirement":

19 "Unanticipated nonrecurring retirement of plant not recognized in
20 setting depreciation rates, with a loss in service value not covered
21 by insurance. Usually, the charging of the retirement against the
22 reserve will unduly deplete the reserve. Early retirements brought
23 about by technological and social changes should properly be

¹⁸ NARUC Public Utility Depreciation Practices at iii-v, National Assoc. of Regulatory Utility Commissioners (1996) ("NARUC Depreciation Manual"). David M. Birnbaum of Missouri is listed as a co-author of the Manual. EMW advises me that he served as the Manager of the Commission's Depreciation Department at this time.

¹⁹ Id. at 30.

1 considered in depreciation accruals and should not be considered
2 extraordinary [emphasis added].”²⁰

3 The learning from the NARUC Depreciation Manual is that early
4 retirements caused by technological and social changes, such as the
5 current renewable energy and decarbonization movement, are considered
6 as “ordinary.”

7 **Q: The NARUC Depreciation Manual states that “obsolescence” is a**
8 **cause of ordinary retirements. What have recognized authorities in**
9 **public utility regulation stated regarding the obsolescence of plant,**
10 **equipment and other utility assets?**

11 A: The question of obsolescence was discussed by the late Dr. James C.
12 Bonbright, Professor of Finance at Columbia University, and former
13 Chairman of the New York Power Authority, in his widely acclaimed text,
14 “Principles of Public Utility Rates”:

15 “In regulation, the allowances for depreciation both as operating
16 expenses and as deductible reserves are designed to cover
17 functional depreciation including obsolescence and not merely
18 physical deterioration or wear and tear. Hence the allowances must
19 be based on estimates or plausible assumptions as to the effect of
20 obsolescence on useful-life expectancies. But neither a corporate
21 management nor a commission can hope to predict, years in
22 advance of the event, dates as of which old properties may need to
23 be retired for reasons of “extraordinary obsolescence.”

24 ...

25 “But there occasionally arise extreme cases of unexpected
26 obsolescence, in which a company faces the necessity, or at least
27 the economic desirability, of retiring expensive portions of its entire
28 plant and equipment years before it has received a fair opportunity
29 to recover its investment therein under a routine procedure of
30 depreciation accounting. Striking examples of this necessity have

²⁰ Id. at 319.

1 arisen in recent years in the gas industry, in which the distribution
2 companies have abandoned their old manufactured-gas plants in
3 favor of the purchase of the much cheaper natural gas from the
4 newer pipeline companies.

5 Under a strictly construed present-value theory of rate making, the
6 fact that a company may have failed to recover its outlay in
7 outmoded plant should not give it even a shadow of a claim to a
8 recovery of this outlay from future consumers. But under an actual-
9 cost or net-investment principle, the problem illustrated by the
10 premature retirement of the manufactured-gas plant presents a
11 dilemma. On the one hand, the cost principle suggests that a
12 company should receive an opportunity to recover from later
13 customers compensation for all capital outlays for which it has not
14 yet received full compensation from earlier customers. Yet, on the
15 other hand, the same cost principle has usually been held to entitle
16 a company to compensation only for such capital outlays as reflect
17 the costs of property still "used and useful in the public."

18 Faced with this dilemma, commissions have tended—wisely, in my
19 opinion—to prefer the former alternative to the latter.”²¹

20 The first paragraph provides important context that while
21 obsolescence should be included in the depreciation expenses, neither
22 utility management nor regulators can forecast the effect of current events
23 on utility plant constructed before the advent of technological, economic, or
24 social changes.

25 The subsequent paragraphs outline the questions faced by
26 regulatory authorities in determining cost issues regarding the
27 undepreciated investment when a significant retirement occurs.

²¹ James C. Bonbright, Principles of Public Utility Rates at 213 (1961).

1 **Q: What is the relevance of Dr. Bonbright's discussion of manufactured**
2 **gas being supplanted by natural gas to the circumstances of coal fired**
3 **electric generation being replaced by renewable resources?**

4 A: Professor Bonbright's reference to the gas industry is directly applicable to
5 the circumstances faced by coal fired electricity generation. While
6 manufactured gas was supplanted by advances in natural gas extraction,
7 transportation, and social acceptance, coal fired generation is being
8 supplanted by wind, solar and other forms of renewable energy. Dr.
9 Bonbright emphasizes that commissions have generally approved the
10 recovery of the remaining net book value of retired plant under these
11 circumstances.

12 **Q: Based on the above guidance, what criteria should be considered in**
13 **the determination of prudence of a retirement?**

14 A: The following criteria are relevant to the determination of considering
15 whether a retirement is prudent:

- 16 • Was the retirement caused by normal and anticipated factors? Is the
17 cause of the retirement reasonably expected to recur in the
18 foreseeable future in similar circumstances?
- 19 • Could the cause of the retirement have been reasonably anticipated
20 and was the retirement event covered by insurance or other
21 provisions?
- 22 • Is it appropriate to address the retirement of the plant in the setting
23 of depreciation rates in future depreciation studies (ordinary
24 retirement)?
- 25 • Was the retirement caused by technological advances, social

1 changes, and economic factors?

2 **Q: Was the retirement of Sibley normal and anticipated as an ordinary**
3 **and typical activity of Evergy Missouri West and the result of forces**
4 **that were experienced by the Company?**

5 A: Yes, especially when considering criteria including technological change,
6 economics, and the national movement toward cleaner generation sources.
7 Plant retirements are a normal and expected part of integrated utility
8 operations. The recurring nature of generating unit retirements is borne out
9 by Evergy Missouri West's own experience and in the experience of its
10 Missouri affiliate, Evergy Metro, Inc. ("Metro"). Metro retired Montrose Unit
11 1 in 2016 and Montrose Units 2 and 3, including common plant, on
12 December 31, 2018. These retirements were driven by results of the IRP
13 process and were announced on June 2, 2017 (which updated the prior
14 retirement announcement of January 20, 2015). Other utilities in Missouri
15 and across the country have retired coal-fired generation under similar
16 circumstances.

17 Similarly, Evergy Missouri West retired Sibley 1 except for the boiler
18 in June 2017 and the remainder of Sibley 1 and Sibley 2 in 2018 when Unit
19 3 was retired. All of these retirements were considered in the Company's
20 IRP filings before retirement and were demonstrated to result in the lowest
21 NPVRR for Missouri customers. When reviewing the prudence of the Sibley
22 retirement, it is appropriate to take a broad view of the Company's

1 retirement practices when a plant approaches the end of its physical or
2 economic life.

3 It is also important to recognize that Sibley provided service to
4 customers for 50 to 60 years, representing a major portion of the expected
5 life of the assets. At the time of retirement, the majority of remaining net
6 book value related to environmental retrofits that were prudent at the time
7 made and appropriately extended the life of the units. However,
8 technological change brought forward renewables rapidly. The pace of
9 renewable technology changed the economics of Sibley for customers. This
10 change, combined with the decline in the social acceptance of coal fired
11 generation, drove the obsolescence of coal generation with the onset of
12 federal, state, local and customer carbon-free emission targets. These
13 factors converged to show through the IRP analytical framework that the
14 retirement of Sibley before the end of its originally estimated depreciable
15 life, with the recovery of and on the remaining net book value, provided the
16 lowest NPVRR to customers.

17 **Q: Are the causes of the Sibley Plant retirement expected to recur in the**
18 **foreseeable future?**

19 A: Yes. The retirement of coal-fired electric generation plants has accelerated
20 greatly over the past few years and is expected to continue at a rapid pace
21 over the next 10 to 12 years. As I previously noted, the Sibley plant was
22 among a group of five Missouri coal plant retirements that began in 2016

1 and will continue through 2028. Additionally, it is reasonable to assume that
2 the Legislature's policy intent with the enactment of the Missouri
3 Securitization Bill will likely accelerate the retirement of other coal facilities
4 that are currently planned for the period beyond 2028.

5 In early 2021 Evergy, Inc. released its 2021 IRP Overview which
6 provides an indication of the level of planned retirements of coal fired
7 generation. The IRP Overview on page 7 states that in 2010 approximately
8 52% of the Company's generation capacity was coal fired generation. By
9 2020 this was reduced to 40%. Further reductions to 24% by 2030 and 7%
10 by 2040 are planned. The IRP states on page 9 that from 2024 through
11 2040 Evergy, Inc. will retire 4,125 MW of fossil generation. The most
12 significant generation reduction in the near-term is the 2023 planned
13 retirement of the remaining coal units at Lawrence Energy Center that
14 represent aged capacity: Unit 4, built in 1960, and Unit 5, built in 1971.²²

15 **Q: Could the Sibley retirement have been reasonably anticipated?**

16 A: Yes, the retirement was the subject of public announcements. As discussed
17 in the Direct Testimony of Company witness Darrin Ives, the retirement of
18 the Sibley Plant was contemplated as early as 2012. Additionally, as noted
19 by Mr. Ives, throughout the period of 2012 to 2017 a number of
20 announcements were made by Evergy Missouri West and its
21 predecessors.²³ On January 20, 2015, a press release was issued

²² Evergy Inc. 2021 Integrated Resource Plan, Overview, page 7

²³ Id. at 23.

1 announcing that Evergy Missouri West would stop burning coal at Sibley
2 Units 1 and 2 by December 31, 2019. Subsequently, on June 2, 2017, a
3 press release announced the planned retirement of five generating units,
4 including Sibley Units 1, 2 and 3 by December 31, 2018, and the potential
5 retirement of a sixth unit (Lake Road 4/6) by December 31, 2019.

6 **Q: Are large terminal or final retirements of generation plant anticipated**
7 **in depreciation studies?**

8 A: Yes. Depreciation analysts typically use a concept of a Life Span date (or
9 probable retirement date) when it is expected that a significant investment
10 in a large location-based asset such as an electric generating station may
11 retire concurrently. I have reviewed the Direct Testimony of Company
12 witness John Spanos and note that he has included the concept of Life Span
13 dates in his calculation of the depreciation rates for each generation facility.
14 I understand that is a continuation of a practice that Mr. Spanos
15 incorporated in prior depreciation studies.

16 **Q: Please explain the use of a Life Span date in prior depreciation**
17 **studies.**

18 A: The inclusion of a Life Span in depreciation calculations is to recognize that
19 the service life of the generating unit will be subject to complete retirement
20 due to economic forces other than due to the physical wear and tear of the
21 assets, or due to the economic viability of major repairs or upgrades. The
22 fact that the Company has included a Life Span date in its prior depreciation

1 calculations clearly indicates that the expectation of the Company was that
2 Sibley would be retired due to economic forces.

3 **Q: Is it reasonable to expect a utility to be able to precisely predict the**
4 **actual retirement date of generation plants many years in advance of**
5 **the retirement?**

6 A: No. As noted in the Bonbright treatise discussed above, neither a utility
7 company's management nor a commission can hope to predict, years in
8 advance of the event, dates as of which old properties may need to be
9 retired.²⁴ However, Dr. Bonbright provides insight into the question of early
10 utility plant retirements when utilities are following the original cost principle,
11 suggesting that a company should receive an opportunity to recover from
12 later customers compensation for all capital outlays for which it has not yet
13 received full compensation from earlier customers. The fact that the Sibley
14 Plant retired due to economic forces earlier than anticipated in prior
15 depreciation studies is a function of the concern described by Dr. Bonbright
16 that the date of economic retirement is not possible to accurately predict.

17 The issue he describes results from the fact that utilities should
18 receive compensation from later customers, however the retired assets are
19 no longer "used and useful". Dr. Bonbright noted that when faced with this
20 issue, commissions have, wisely in his opinion, tended to allow recovery of
21 the investment from the later customers. If his discussion on this matter is
22 considered in the context of the Sibley plant retirement, the fact that the

²⁴ Bonbright at 213.

1 plant retired due to economic forces at a time different than forecast in the
2 last depreciation study does not make the retirement an imprudent
3 retirement.

4 Based on my experience preparing depreciation studies for over 40
5 years, retirements prior to the Life Span dates are common, in particular
6 where the plant is reaching its expected average service life estimate. As
7 assets age, the probability of major repairs to the plant can become
8 uneconomic due to the cost of the repair being depreciated over a reduced
9 period of time. In the circumstances of the Sibley plant, which was placed
10 in service approximately 60 years ago, the economic feasibility to repair and
11 upgrade plant – especially a coal-fired plant – must be reviewed in light of
12 the longer-term impact to customers at the time of major upgrades or
13 repairs. For example, as discussed above, the largest component of
14 Sibley’s undepreciated investment was the pollution control equipment
15 installed in 2009 to meet clean air requirements. However, as the transition
16 away from fossil fuels has accelerated, such investments must be re-
17 evaluated in light of more restrictive environmental mandates and
18 expectations.

19 **Q: Was the retirement of the Sibley plant considered in the setting of**
20 **depreciation rates in prior depreciation studies?**

21 A: Yes. The last depreciation study filed in February 2016 in Evergy Missouri
22 West’s rate case No. ER-2016-0156, based on the assets in service as of
23 December 31, 2014, included a Life Span date of December 31, 2019 for

1 Sibley Units 1 and 2, and December 31, 2040 for Unit 3 and the Sibley
2 common plant. The ultimate retirement of Sibley Units 1 and 2 in 2018
3 occurred approximately within a year of the Life Span date used within the
4 depreciation study. The retirement of Sibley Unit 3 and the Sibley common
5 property in 2018 was the result of a number of factors including, the
6 economics of the plant, the changes in technology providing for the
7 economic development of clean air generation (for example the introduction
8 of economically feasible solar and wind generation), national environmental
9 requirements, and the changes in the social acceptance of coal fired
10 generation. All of the these greatly accelerated in the time between the
11 completion the of the 2014 depreciation study filed in February 2016, and
12 late 2018. The impact of these changes was reflected in the company's IRP
13 filings where the Sibley Unit 3 was identified with an expected retirement
14 date of December 31, 2018. As such, when Evergy Missouri West was
15 evaluating the decision to retire Sibley Unit 3 and the associated common
16 property, a significant amount of change had transpired since the
17 development of the Life Span date for Sibley Unit 3 in the last depreciation
18 study.

19 The fact that these units were retired prior to the Life Span date in
20 depreciation studies based on 2014 data does not mean the decision to
21 retire the unit was imprudent. Rather it is a reflection of the circumstances
22 as described by Dr. Bonbright.

23 The long held underlying principles of regulatory and group

1 accounting are underpinned by the expectation of frequent and on-going
2 retirement activity. The fact that the actual utility retirements do not align
3 precisely to the Iowa curve and Life Span estimates in prior depreciation
4 studies rarely results in a finding that a retirement was imprudent, but rather
5 forms the basis of updated estimates in future studies.

6 Based on my review of recent regulatory decisions, the retirement of
7 coal-fired plants prior to the Life Span date used in prior studies has rarely
8 resulted in a ruling that the retirement of prudently made investments was
9 imprudent.

10 **Q: Was the decision to retire the Sibley plant in 2018 a prudent one.**

11 A: Yes, the decision to retire Sibley was prudent. Moreover, the plant's
12 retirement was not premature as Sibley had been in service for
13 approximately 60 years. Even if one considers this an "early" retirement, it
14 does not justify finding this decision to be imprudent. Clearly the retirement
15 of the Sibley plant was contemplated by Evergy Missouri West due to
16 obsolescence caused by technological, social, and economic changes, as
17 well as environmental legislation. Furthermore, the Company had
18 contemplated the eventual retirement of the Sibley plant in prior
19 depreciation studies. The fact that the plant retired at an earlier date than
20 the Life Span date simply reflects the realities of operating a coal plant in
21 the face of technological, social, and economic changes, and increasingly
22 strict federal legislation. To disallow the recovery of an undepreciated

1 investment related to a prudently made retirement decision is, in effect, a
2 retroactive review of the originally prudently made investment.

3 **Q: Has this view been accepted by other state regulators?**

4 A: Yes. The NARUC Depreciation Manual is specific in its directions related to
5 retirements caused by technical and social change as follows:

6 Ordinary Retirement

7 Recovery of the original cost of an ordinary retirement depends
8 upon depreciation accruals and net salvage. Ordinary retirements
9 are caused by such factors as wear and tear, decay, action of the
10 elements, inadequacy, obsolescence, changes in the art, and
11 changes in demand. Ordinary retirements may be classified in
12 terms of location (reusable) retirements and final retirements. (page
13 30)

14 Obsolescence may bring about retirements by rendering plant
15 uneconomical, inefficient, or otherwise unfit for service because of
16 improvements in technology or because of changes in function.
17 Equipment manufacturers may contribute to obsolescence by
18 discontinuing production of replacement parts or de-emphasizing
19 maintenance, software, or other kinds of support for older
20 equipment. (page 15)

21 Technological advances have increased the frequency in which
22 obsolescence causes the retirement of utility plant. Computers, the
23 electronic chip, ... interest in nonutility power production and
24 demand-side management are technological developments that
25 have impacted utility operations. (page 15)

26 Changes in demand reflect changing customer preferences
27 requiring the replacement of plant which no longer permits the utility
28 to fulfill its obligation to provide service. (page 15)

29 Public authorities may require ... utility plant to be replaced or
30 refurbished because its design fails to meet current service,
31 environmental or safety standards. (page 15)

32 Extraordinary Retirement

33 Unanticipated nonrecurring retirement of plant not recognized in
34 setting depreciation rates, with a loss in service value not covered
35 by insurance. Usually, the charging of the retirement against the
36 reserve will unduly deplete the reserve. Early retirements brought
37 about by technological and social changes should properly be

1 considered in depreciation accruals and should not be considered
2 extraordinary.²⁵[emphasis added]

3 These principles were followed by interested parties and ultimately
4 by regulatory commissions in proceedings brought by Idaho Power
5 Company²⁶ and PacifiCorp.²⁷

6 **VI. RATEMAKING TREATMENT OF SIBLEY AAO**

7 **Q: What are your recommendations regarding Sibley’s retirement and the**
8 **disposition of the AAO based on your view that the decision to retire**
9 **the Sibley Plant was prudent?**

10 **A:** There are four key recommendations that I make based on my finding that
11 the decision to retire Sibley was prudent:

- 12 • The Company should be allowed to earn a return of the unrecovered
13 costs as of the date of the retirement;
- 14 • The Company should be allowed to earn a return on the unrecovered
15 costs as of the date of the retirement;
- 16 • The Company be allowed to recover and earn a return on the prudent
17 decommissioning costs of the Sibley plant; and
- 18 • The Non-Fuel Operations and Maintenance (NFOM) and labor costs
19 deferred pursuant to the AAO should be refunded to customers.

20 Each of the above four recommendations is discussed below. The actual
21 accounting treatment for the required adjustments is discussed in the Direct
22 Testimony of Ronald A. Klote.

²⁵ NARUC Public Utility Depreciation Practices at 14-15, 30 and 319 (1996).
²⁶ Order No. 33771 at 7, In re Idaho Power Co., Case No. IPC-E-16-24 (Idaho P.U.C., May 31, 2017).
²⁷ Resolution E-4687, In re PacifiCorp request to establish Carbon Decommissioning Cost Memorandum Account, PacifiCorp AL 496-E/MM7 (Calif. P.U.C., Jan. 20, 2015).

1 **Q: What is the basis for your recommendation that Evergy Missouri West**
2 **should be allowed to earn a return on and return of the net book value**
3 **of the plant?**

4
5 A: As noted above, the decision to retire all remaining assets at the Sibley
6 Plant in November 2018 was a prudent decision caused by normal and
7 anticipated factors including technological advances, social change, and
8 economic factors. Retirements of this type are specifically noted to be
9 “ordinary retirements” on page 30 of the NARUC Depreciation Manual for
10 the determination of return on and return of investment.

11 The NARUC Manual at page 319 is very clear: “Early retirements
12 brought about by technological and social changes should properly be
13 considered in depreciation accruals and should not be considered
14 extraordinary.” The net book value (“NBV”) of the Sibley plant should be
15 moved into the accumulated depreciation account in accordance with the
16 treatment afforded a prudent and ordinary retirement. There is no
17 authoritative reason not to permit the Company to continue to earn a return
18 on and return of the net book value.

19 **Q: Why do you recommend that the Company be allowed to recover and**
20 **earn a return on the prudent decommissioning costs of the Sibley**
21 **plant?**

22 A: The retirement of the Sibley plant in 2018 was a prudent decision, and the
23 Company should be allowed to recover its invested capital in the plant and
24 should be allowed to earn a return on the unrecovered investment in the

1 plant. The costs to decommission an electric generation plant are clearly
2 part of the capital cost of the plant in accordance with the USoA definition
3 of service value which states: “*Service value means the difference between*
4 *original cost and net salvage value of electric plant.*”²⁸

5 Because the net salvage value of an asset is part of the service value
6 of the asset, the decommissioning costs are appropriately charged to the
7 accumulated depreciation account of the utility in the circumstance of an
8 ordinary and prudent retirement. All costs of removal/retirement related to
9 the Sibley plant should continue to follow the current Evergy Missouri West
10 practice of charging these costs to the accumulated depreciation account.
11 This treatment is consistent with long-standing practices in Missouri.

12 **Q: What is the accounting treatment that will implement these**
13 **recommendations regarding the return on and return of investment?**

14 A: The specific accounting treatment related to these recommendations is
15 described in the Direct Testimony of Mr. Klote.²⁹ I understand that the future
16 return of and return on investment components of the undepreciated
17 investment of the Sibley plant are requested to be isolated and amortized
18 into the revenue requirement over a 20-year period ³⁰

²⁸ USoA Definition 37.

²⁹ As discussed in the Testimony of Mr. Klote at Section CS-132 – Amortization of the Sibley Regulatory Liability.

³⁰ As discussed in the Testimony of Mr. Klote and Mr. Spanos.

1 **Q: Is your recommendation consistent with how other jurisdictions have**
2 **treated situations similar to the Sibley retirement?**

3 A: Yes. I have reviewed a number of Orders relating to retirements of electric
4 generation plants that have received favorable regulatory treatment. A
5 summary of two such cases is provided below.

- 6 • Alabama Power Company - Based on an Order issued by the
7 Alabama Public Service Commission in Docket No. U-5033 (Sept. 7,
8 2011) (“Environmental Accounting Order”), Alabama Power
9 established a series of regulatory assets to record the unrecovered
10 investment costs of two-third of its coal-fired generating plants,
11 including the unrecovered plant asset balance and the unrecovered
12 costs associated with site removal and closure as a result of the
13 impact of EPA mandates on their previously anticipated economic
14 lives. The Environmental Accounting Order permitted the
15 amortization and recovery of such costs over the plant’s remaining
16 useful lives.

17 For example, Alabama Power closed Gorgas Units 8, 9, and 10
18 (approximately 1,160 MWs) in April 2019 due to the expected costs
19 of compliance with federal and state environmental regulations.
20 Under the Environmental Accounting Order, approximately \$654
21 million of net investment costs were transferred to a regulatory asset
22 at the retirement date and recovered over the units' remaining useful
23 lives, as established prior to the decision to retire.

- 24 • Public Service Co. of Colo. - The Colorado Public Utilities
25 Commission (“PUC”) addressed the issue of the recovery of
26 depreciation and removal costs through deferral accounting related
27 to coal-fired plants of Public Service Co. of Colo. (“PSCo”) in
28 Decision No. C09-1446 (Dec. 24, 2009), ¶¶ 111-20, issued in Docket
29 No. 09AL-299E. The PUC approved a settlement agreement where

1 a regulatory asset would be created for “the return of and return on”
 2 previously unrecovered costs of retirement and defined the method
 3 for deferred accounting for the early retirement of a production
 4 facility.

5 The PUC confirmed this approach to “deferred accounting”
 6 regarding the “early retirements” of certain coal plants by PSCo in a
 7 Final Order Addressing Emission Reduction Plan, Decision No.
 8 C10-1328, ¶¶ 194, 206-07, 210 (Dec. 15, 2010) in Docket No. 10M-
 9 245E. The PUC approved the utility’s proposal that it “shall recover
 10 a return of and a return on” depreciation and removal costs in its
 11 next general rate case.

12 **Q: Please outline the amounts currently being deferred within the AAO.**

13 A: I understand the forecasted November 30, 2022 costs to be included in the
 14 AAO to be as follows:

Sibley AAO Costs			
Forecast Amounts as of November 30, 2022			
		Annual Amount	Forecast Amount November 30, 2022
Expense Components			
	Labor	\$ 903,963	\$ 3,615,852
	Non-Labor NFOM	9,532,495	38,129,980
	Subtotal Expense	\$ 10,436,458	\$ 41,745,832
Rate Base Components			
	Net Book Value	\$ 145,161,990	
	ADIT/EDIT/NOLs	(40,330,218)	
	Materials and Supplies	11,045,961	
	Fuel Inventory	9,605,756	
	Subtotal Rate Base	\$ 125,483,489	
	Rate of Return	9.870%	
	Subtotal Return Component	\$ 12,385,077	\$ 49,540,308
	Total Sibley AAO	\$ 22,821,535	\$ 91,286,140
	Total Depreciation Deferred	\$ 10,362,077	\$ 41,448,308

1 **Q: Have you confirmed the net book value of the Sibley plant as used in**
2 **the above return of investment and depreciation amounts?**

3 A: Yes. I have reviewed the net book value (“NBV”) calculations as of the
4 retirement date, as provided in the Rebuttal Testimony of Company witness
5 Spanos in the AAO proceeding, and I find the calculations to be reasonable.
6 Under the group accounting concepts used by the Company and most other
7 regulated generation plant operators, the NBV of each retirement unit within
8 the group account are not tracked. While some plant accounting programs
9 (as such the PowerPlan accounting system) attempt to provide a NBV
10 amount, the resultant calculations do not recognize a number of critical
11 considerations. For example, to my knowledge the PowerPlan NBV
12 algorithms do not recognize the accumulated depreciation variances of the
13 booked accumulated balances to the calculated (or theoretical)
14 requirements, and do not adequately adjust for the historic changes in
15 depreciation rates caused by the updating of the depreciation parameters
16 over the life of the account. The NBV of \$145.2 million, calculated by
17 Gannett Fleming as of June 30, 2018, reflects the NBV of the retired assets.

18 **Q: Do you recommend refunding to customers any of the above**
19 **amounts?**

20 A: Yes. As discussed below, I recommend the Labor and Non-Labor NFOM
21 (non-fuel operating and maintenance) amounts be refunded to customers.

1 **Q: Please outline the remainder of the costs currently in the AAO.**

2 A: In addition to costs associated with the return on and return of the
3 undepreciated investment, the regulatory liability account associated with
4 the AAO has been collecting the revenue associated with:

- 5 • Labor included in the revenue requirement associated with the
6 operation of the Sibley Plant; and
- 7 • Non-Fuel Operation and Maintenance (“NFOM”) costs related to the
8 Sibley Plant that were included in the revenue requirement.

9 I understand that these costs are forecast to total \$41,745,832 as of
10 November 31, 2022.

11 As these deferred costs are known and Evergy Missouri West has
12 not incurred any actual expenditures related to these costs, it is reasonable
13 to return the NFOM components of the previously approved revenue
14 requirement back to customers. I view that a 4-year refund period is
15 reasonable given that the costs had accumulated in the AAO over the past
16 over four-year period.

17 **VII. FUTURE REMOVAL OF ELECTRIC GENERATION ASSETS: THE**
18 **PROACTIVE COLLECTION OF THE REQUIRED CAPITAL COSTS**

19 **Q: Please describe the Company’s current treatment for the recovery of**
20 **cost of removal of its electric generation plants.**

21 Currently Evergy Missouri West collects estimated future net salvage
22 associated with interim retirement activity but has not proactively collected
23 the estimated costs to terminally remove or retire assets. At the time of

1 retirement of assets (including electric generation plants), the costs of
2 removal or retirement related to final or terminal retirements are charged
3 against the accumulated depreciation account for which there has been no
4 pro-active accumulation of the required costs of decommissioning. This
5 approach increases the net book value of the assets remaining in service to
6 be recovered through future depreciation expense.

7 **Q: Does the current approach as described above appropriately match**
8 **the costs included in the revenue requirement to the use of the assets**
9 **by the customers?**

10 A: No. The more appropriate method of matching the total capital costs of an
11 asset to the consumption of the service value of the asset is to include the
12 estimated costs of retirement in the depreciation rate calculations during the
13 asset's life. The inclusion of net salvage percentages into depreciation rate
14 calculations is widely accepted in regulatory jurisdictions throughout North
15 America.³¹ Depreciation is not simply the allocation of original cost to
16 expense. In the most widely used definition of depreciation for regulated
17 utilities, the USoA defines depreciation as "the loss in service value not
18 restored by current maintenance incurred in connection with the
19 consumption or prospective retirement of property in the course of service
20 from causes which are known to be in current operation and against which
21 the utility is not protected by insurance."³² The operative words in this

³¹ For example, the FERC, and many States, including the States of New York, Illinois, Montana, California, North Dakota, South Dakota, and Minnesota.

³² USoA Definition 12.

1 definition are “service value.” The USoA goes on to define service value as
2 “the difference between the original cost and the net salvage value of the
3 utility plant.”³³ The service value rendered by an asset, *i.e.*, depreciation,
4 must reflect both its original cost and its net salvage. The USoA further
5 defines “net salvage value” to mean the salvage value of property retired
6 less the cost of removal, with “cost of removal” being defined as the cost of
7 demolishing, dismantling, tearing down or otherwise removing electric plant,
8 including the cost of transportation, and handling incidental thereto.³⁴

9 **Q: Is it reasonable to defer the collection of net terminal salvage costs**
10 **until such time as the cost is actually incurred?**

11 A: No. Allocating net salvage costs during the life of the related plant is more
12 appropriate and equitable and is in accordance with authoritative texts³⁵ and
13 most uniform systems of accounting including the USoA³⁶. Delaying
14 collection until such costs are incurred results in a charge to customers for
15 plant from which they did not receive service and, as a result of the delay in
16 recovery, also results in higher revenue requirements related to net salvage.

17 The USoA requires that depreciation be recognized through accrual
18 accounting. That is, the service value of an asset must be accrued during
19 the life of the asset. Since net salvage is a part of the service value, it must
20 be accrued during the life of the related asset in order to comply with the

³³ USoA Definition 37.

³⁴ USoA Definitions 19 & 10.

³⁵ Textbook “Depreciation Systems” by Frank K. Wolf and W. Chester Fitch (Iowa State University Press, 1994) at pp. 7-8 and 51-68; NARUC Depreciation Manual, Ch. XI, Estimating Salvage and Cost of Removal, pages 157-64.

³⁶ USoA, Electric Plant Instruction 10- Additions and Retirements of Electric Plant, Part (F).

1 USoA. As such, regulatory decisions that require the recovery of costs of
2 removal be transferred to future customers through denial of the inclusion
3 of the estimated costs in the depreciation rate calculations need to
4 understand that the decisions are in contrast to FERC published and long-
5 followed net salvage concepts from regulatory jurisdictions throughout
6 North America. When amounts are collected in advance of retirement, such
7 amounts reduce rate base and thereby provide a return on these funds to
8 the customers who have provided them. As a result, this is an equitable
9 outcome for both the utility and current and future customers.

10 **Q: Do any utilities regulated by this Commission currently include costs**
11 **of removal or retirement into the depreciation rate calculations?**

12 A: Yes. I am aware that at least the last two depreciation studies completed on
13 behalf of Missouri-American Water Company have included costs of
14 retirement and removal (net negative salvage) into the depreciation rate
15 calculations. I understand that the depreciation rates for Ameren Missouri
16 electric generation facilities also include a provision for interim retirements,
17 but do not have a provision for final or terminal retirement.

18 **Q: Why is it important to implement this change now?**

19 A: Given the federal legislation and initiatives promoting a transition to
20 renewable energy and away from fossil fuel generation, the pace of large
21 terminal electric generation retirements will increase over the next 10 years.
22 The announced retirement of 4 additional coal fired generation plants in
23 Missouri over the next 8 years will require significant amounts of funding for

1 the removal of the retired plant. Continuation of the current method of
2 charging the removal costs related to terminal retirement to the accumulated
3 depreciation account will result in an increase in the net book value of
4 investment related to retired facilities and will create a burden to be
5 recovered over future generations. To the extent that this burden can be
6 mitigated through the buildup of the accumulated depreciation account with
7 the inclusion of the estimated future costs of removal, then future customers
8 will only be burdened with the recovery of costs related to the assets directly
9 providing utility service at that time. Otherwise, future generations of
10 customers will be significantly and unfairly impacted by the cost of service
11 in those years.

12 **Q: How do you recommend the Commission resolve this issue?**

13 A: I understand that the Direct Testimony of Mr. Spanos in this proceeding
14 reflects a change to include the recovery of terminal net salvage into the
15 depreciation rate calculations and I fully support this change. I recommend
16 that in this proceeding the Commission determine that cost of removal
17 should be included in the calculation of depreciation rates in future
18 depreciation studies consistent with virtually all other jurisdictions in the
19 United States, including FERC.

1 **VIII. SUMMARY OF RECOMMENDATIONS**

2 **Q: Please summarize your recommendations.**

3 **A:** My recommendations to the Commission are:

- 4 1. The decision by Evergy Missouri West to retire the Sibley plant in
5 late 2018 was reasonable and prudent. That decision was
6 consistent with Missouri, Midwest, and North American trends of
7 coal plant retirements that began over the last ten years and have
8 continued to accelerate. Evergy Missouri West is entitled to the
9 return of and the return on its unrecovered investment in the
10 Sibley plant.
- 11 2. The NBV of the Sibley plant should be recorded as an ordinary
12 retirement transaction requiring the following steps:
- 13 a. The gross plant and accumulated depreciation account
14 should be adjusted to reflect the retirement of the complete
15 original cost of the plant.
- 16 b. The AAO should be adjusted to remove the AAO
17 components related to the return on the Net Book Value at
18 the time of retirement.
- 19 c. All costs of removal/retirement related to the Sibley plant
20 should continue to follow the current Evergy Missouri West
21 practice of charging these costs to the accumulated
22 depreciation account.
- 23 3. The NFOM costs that were accumulated in the Regulatory Liability
24 per the AAO should be returned to customers over a four-year
25 period representing the time period in which the amounts were
26 collected.

1 4. The Commission should adopt Every witness Spanos
2 depreciation rates that include cost of removal in the calculation
3 of depreciation rates in future depreciation studies.

4 **Q: Does this conclude your Direct Testimony?**

5 **A: Yes, it does.**

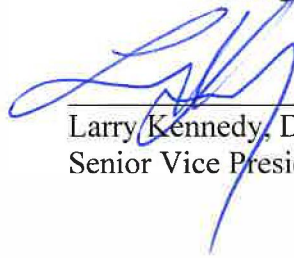
DECLARATION OF LARRY KENNEDY

Country of Canada)
) ss
Province of Alberta)

Larry Kennedy, being duly sworn, deposes and says that the information accompanying the attached *Direct Testimony* was prepared on behalf of Evergy Missouri West by his or under his direction and supervision.

Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.¹

Concentric Energy Advisors, Inc.



Larry Kennedy, Declarant
Senior Vice President

¹ See Letter from the Commission, dated March 24, 2020: “[A]ny person may file an affidavit in any matter before the Commission without being notarized so long as the affidavit contains the following declaration: [‘]Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.[’] _____ Signature of Declarant[.] This guidance applies both to pleadings filed in cases before the Commission and to required annual reports and statements of income.”

LARRY E. KENNEDY, CDP

Senior Vice President

Mr. Kennedy has been in the pipeline, electric, gas utility and municipal infrastructure business for 40 years. As Senior Vice President, Concentric Advisors, ULC, Mr. Kennedy has provided professional consulting services to gas and electric utilities including generation facilities (including nuclear facilities), and high voltage transmission lines, large diameter transmission pipelines, railway systems and municipally owned utility systems. Previously, Mr. Kennedy was with Gannett Fleming Canada ULC, for over 17 years, where he was responsible for completing depreciation studies and provided advice related to large capital program spending and controls for many regulated North American utilities. Mr. Kennedy was also employed by Interprovincial Pipelines Limited (now Enbridge Pipelines) for 15 years in several plant accounting and regulatory positions and with Nova Gas Transmission Pipelines (now TC Energy) for three years as a Depreciation Specialist.

Mr. Kennedy has provided expert witness testimony related to depreciation, stranded costs, capital accounting issues, utility valuation, and property tax issues before several North American regulatory bodies. Mr. Kennedy has completed numerous seminars and all courses offered by Depreciation Programs, Inc. Mr. Kennedy is a member of the teaching faculty of the Society of Depreciation Professionals ("SDP") and has presented depreciation, stranded cost, and capital accounting related topics to the SDP, Canadian Electric Association, Canadian Gas Association, Canadian Property Taxpayers Association, Alberta Utilities Commission, British Columbia Utilities Commission and the Canadian Energy Pipeline Association. Mr. Kennedy is a past Society of Depreciation Professionals President.

PERSONAL INFORMATION

- Diploma, Applied Arts - Business Administration, Northern Alberta Institute of Technology, 1978
- Member, Society of Depreciation Professionals
- Certified Depreciation Professional

EXPERIENCE

Representative Project Experience

- Consolidated Edison Company of New York, Inc.: Mr. Kennedy co-authored a study and report which presented the results of research focusing on prior periods of transformative change and more recent discussions of policy tools that could address the impacts of climate change on the Company's electric, steam, and natural gas businesses.
- Montana-Dakota Utilities Co.: A study was developed to determine the appropriate depreciation parameters for all electric generation, transmission and distribution assets. The study and associated expert testimony were submitted to the Montana Public Service Commission in 2018. Elements of the study included a field review of electric generation and transmission plant, the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook and



the estimation of the retirement of generation facilities due to environmental legislation and estimation of net salvage requirements.

- Commonwealth Edison Company: Mr. Kennedy sponsored extensive Rebuttal Testimony related to the average service life, net salvage estimations, and appropriate depreciation practices in a 2020 rate proceeding.
- Great Plains Natural Gas Co.: Annual updates of depreciation rates and net salvage requirements were calculated and submitted to the Minnesota Department of Commerce annually since 2017.
- Midwestern Gas Transmission Company: The assignment included development of a detailed depreciation study and Testimony to develop the appropriate depreciation policy to align with the organization's overall goals and objectives. The resulting depreciation study, which was submitted to the Federal Energy and Regulatory Commission, incorporated the concepts of time-based depreciation for gas transmission accounts and development of Economic Planning Horizons. The Direct Testimony included significant discussion related to the topics of Decarbonization and changing political climate towards removal of fossil fuel demand forecasts.
- National Grid USA Service Company Limited: A depreciation study was completed in 2020 for the National Grid High Voltage Direct Current (HVDC) electric interstate transmission line. The study included consideration of the average service life of the system components, the level of components of the system and the compliance of the recommended componentization to the FERC Uniform System of Accounts. The resultant study was used by the company in filings with the Federal Energy and Regulatory Commission (FERC)
- Viking Gas Transmission Company - The assignment included working with the company to develop the appropriate depreciation policy to align with the organization's overall goals and objectives. The resulting depreciation study, which was submitted to the Federal Energy and Regulatory Commission, incorporated the concepts of time-based depreciation for gas transmission accounts and development of Economic Planning Horizons, including discussion related to the long demand of natural gas.
- Society of Depreciation Professionals (SDP): Mr. Kennedy has presented at the annual conferences on the topic of the erosion of the regulatory compact throughout North America, the Future of Energy transition and its impacts on recovery of investment. Additionally, Mr. Kennedy is a member of the SDP teaching faculty and has lead a number of workshops on various aspects of decarbonization and has co-instructed on the topic of the future of energy.

Other Representative Project Experience

- Alberta Departments of Energy and Forestry and Agriculture: Detailed toll comparison and valuation models were developed to provide a comparison of the toll fairness of each of the Provinces Rural Electrification Associations (“REA”) to the comparable Investor Owned Utilities (“IOU”) for the 32 REA’s currently operating in Alberta. In addition to providing a toll comparison of the REA and IOU, a fair market valuation for each of the REA’s was also prepared. The final report of the toll compatibility and specific valuations



were submitted to the Alberta Department of Energy and the Alberta Department of Forestry and Agriculture. Mr. Kennedy was the Responsible Officer on this project.

- Alliance Pipeline L.P. A number of depreciation studies have been completed by Mr. Kennedy for both the Canadian and US assets of Alliance Pipelines. The most recent studies completed in 2012 for Submission to the National Energy Board of Canada and to the Federal Energy Regulatory included operational discussions related to the gas transmission plant, the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook, and the inclusion of an Economic Planning Horizon.
- AltaGas Utilities Inc.: A number of depreciation studies have been completed, which included the assembly of basic data from the Company's accounting systems, statistical analysis of retirements for service life and net salvage indications, discussions with management regarding the outlook for property, and the calculations of annual and accrued depreciation. The studies were prepared for submission to the Alberta Energy and Utilities Board ("Board"). Mr. Kennedy has appeared before the Alberta Utilities Commission on behalf of AltaGas on a number of occasions.
- AltaLink LP: An initial study was developed for submission to the Alberta Utilities Commission ("AUC") in 2002. The study included the estimation of service life characteristics, and the estimation of net salvage requirements for all electric transmission assets. A net salvage study and technical update was also filed with the Board in 2004. Since 2004, additional depreciation studies were filed in 2005, 2010 and 2012, 2016 and 2018. The 2010, 2012, 2016 and 2018 studies included a number of provisions in order to ensure compliance to Alberta's Minimum Filing Requirements for depreciation studies and for compliance to the International Financial Reporting Standards. These studies also specifically analyzed the pace of technical change in the Alberta Electric system, and recently have specifically considered the impacts of early retirements caused by storms and forest fires.
- ATCO Electric: Studies have included the development of annual and accrued depreciation rates for the electric transmission and distribution systems for the Alberta assets of ATCO Electric, in addition to the generation, transmission, and distribution assets of Northland Utilities Inc. (NWT) and the distribution assets of Northland Utilities (Yellowknife) Inc. The ATCO Electric studies were submitted to the AUC for review, while the NWT and Northland Utilities (Yellowknife) Inc. studies were submitted to the Northwest Territories Utilities Board and Yukon Electric Company Limited (YECL) was submitted to the Yukon Public Utilities Board. These studies also specifically analyzed the pace of technical and recently have specifically considered the impacts of early retirements caused by storms and forest fires.
- ATCO Gas: Studies were prepared in 2010 and 2018 which were the subject of a review by the AUC. Elements of all of the studies included the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook, and the estimation of net salvage requirements. These studies also specifically analyzed the



pace of technical change in the Alberta Gas system, and recently have specifically considered the impacts of early retirements caused by storms and forest fires.

- Centra Gas Manitoba, Inc.: The study included development of annual and accrued depreciation rates for all gas plant in service. Elements of the study included a field inspection of metering and compression facilities, service buildings and other gas plant; service life analysis for all accounts using the retirement rate analysis on a combined database developed from actuarial data and data developed through the computed method; discussions with management regarding outlook; and the estimation of net salvage requirements. A similar study was completed in 2006, 2011, and 2015. The 2011 and 2015 studies were the subject of a review by the Manitoba Public Utilities Board in 2012 and 2016. Mr. Kennedy has also consulted on issues regarding International Financial Reporting Standards (“IFRS”) compliance and required componentization.
- Enbridge Gas Distribution Inc.: Full and comprehensive depreciation studies have been completed in 2009 and 2011. The 2009 study also included review of the company's gas storage operations. Both studies included the development of annual and accrued depreciation rates for all depreciable natural gas distribution, transmission and general plant assets. Elements of the studies included the service life analysis for all accounts using the computed mortality method of analysis, discussion with management regarding outlook and the estimation of net salvage requirements. Studies were prepared for submission to the Ontario Energy Board.
- Mr. Kennedy has also completed an allocation of the accumulated depreciation accounts into the amounts related to the recovery of original cost and the amounts recovered in tolls for the future removal of assets currently in service. The allocations were determined as of December 31, 2009 and were deemed by the company's external auditors to be in conformance with proper accounting standards and procedures. In 2013, a review of the reserve required for the future removal of assets currently in service was undertaken by Mr. Kennedy. The results of the review were summarized in evidence presented by Mr. Kennedy to the Ontario Energy Board.
- ENMAX Power Corporation: Studies have included the development of annual and accrued depreciation rates for all depreciable electric transmission assets. Elements of the studies included the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook, and the estimation of net salvage requirements. Studies were prepared for submission to the Alberta Department of Energy and more recently for submission to the Alberta Energy and Utilities Board. Similar studies have also been completed for submission for the ENMAX Electric Distribution assets for submission to the AUC. The ENMAX distribution asset assignments also included an extensive asset verification project where the plant accounting and operational asset records were verified to the field assets actually in service.
- Fortis Group of Companies: Studies have included the development of annual and accrued depreciation rates for the electric distribution assets in Alberta and for the



generation, transmission, and distribution assets in British Columbia. The FortisBC Inc. studies were completed and filed with the British Columbia Utilities Commission (“BCUC”) in 2005, 2010, 2011 and 2018 encompassing both the FortisBC electric and natural gas companies. FortisAlberta Inc. studies were completed in 2004 (updated in 2005), 2009 and 2010. Elements of the studies included the development of average service lives using the retirement rate method of analysis, development of net salvage estimates, compliance with IFRS, and the determination of appropriate annual accrual and accrued depreciation rates. The most recent studies also specifically analyzed the pace of technical change in the Electric systems, and specifically considered the impacts of retirements, system modernization and technical enhancements to the assets.

- International Financial Reporting Standards (“IFRS”): Mr. Kennedy has been retained by numerous clients encompassing most Canadian Provinces and Territories. The assignments included the review of company's assets and depreciation practices to provide opinion on the compliance to the IFRS. The assignments have also included the issuance of opinion to the External Auditors of Utilities to comment on the manner in which the Utilities can minimize differences in the regulatory ledgers and the accounting records used for financial disclosure purposes. Mr. Kennedy has also presented to the Canadian Electric Association, the Society of Depreciation Professionals, the Canadian Energy Pipeline Association and to the BCUC on this topic.
- Mackenzie Valley Pipeline Project: This assignment included the review of the proposed depreciation schedule for the proposed Mackenzie Valley Pipeline. The review included a discussion of the policies used by the company and the depreciation concepts to be included in a depreciation schedule for a Greenfield pipeline. The review was supported through appearance at the oral public hearings before the National Energy Board of Canada (“NEB”).
- Manitoba Hydro: A study was developed to determine the appropriate depreciation parameters for all electric generation, transmission and distribution assets. The study was submitted to the Manitoba Public Utilities Board. Elements of the study included a field review of electric generation and transmission plant, the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook and the estimation of net salvage requirements. A similar study was also completed in 2006 and in 2011. The 2011 depreciation study was the subject of a review by the Manitoba Public Utilities Board in 2012. Mr. Kennedy has also consulted with Manitoba Hydro on issues regarding IFRS compliance and required componentization.
- New Brunswick Power: Mr. Kennedy completed a comprehensive depreciation review of the electric generation (including the nuclear facilities), transmission, distribution and general plant assets. The review, which was prepared for submission to the New Brunswick Public Utilities Board, included a significant amount of discussion regarding the development of depreciation policy for the company. The study also included development of procedures to extract data from the company databases, tours of the company facilities, interviews with operational and management representatives,



development of appropriate net salvage rates, development of average service life estimates, and the compilation of the report.

- Newfoundland and Labrador Hydro (NALCOR): Mr. Kennedy developed comprehensive depreciation studies that included the development of depreciation policy and rates for NALCOR. The studies provided a significant review of the previous depreciation policy, which included use of a sinking fund depreciation method and provided justification for the conversation to the straight-line depreciation method. The study, which was prepared for submission to the Newfoundland and Labrador Utilities Commission, included a significant amount of discussion regarding the development of depreciation policy for the company. The study also included development of procedures to extract data from the company databases, tours of the company facilities, interviews with operational and management representatives, development of appropriate net salvage rates, development of average service life estimates, and the compilation of the report for submission in a General Tariff Application. Additional studies were also completed in 2008 and 2010. The 2010 and 2017 studies were the subject of Regulatory Review in 2012 and 2019.
- Ontario Power Generation: Assignments have included a review of the Depreciation Review Committee process completed in 2007. This review provided recommendations for enhanced internal processes and controls in order to ensure that the depreciation expense reflects the annual consumption of service value. Additionally, full assessments of the lives of the regulated assets of the company's electric generation hydro and nuclear plants were completed in 2011 and 2013 and were submitted to the Ontario Energy Board for review.
- TransCanada Pipelines Limited - Alberta Facilities: The assignment included working with the company to develop the appropriate depreciation policy to align with the organization's overall goals and objectives. The resulting depreciation study, which was submitted to the Alberta Energy and Utilities Board, incorporated the concepts of time-based depreciation for gas transmission accounts and unit-based depreciation for gathering facilities. The data was assembled from two different accounting systems and statistical analysis of service life and net salvage were performed. For gathering accounts, the assignment included the oversight of the development of appropriate gas production and ultimate gas potential studies for specific areas of gas supply. Field inspections of gas compression, metering and regulating, and service operations were conducted. Studies were completed in 2002 and 2004, 2007, 2009 and 2012, 2015, and 2018.
- TransCanada Pipelines Limited - Mainline Facilities: The study prepared for submission to the NEB included the development of annual and accrued depreciation rates for gas transmission plant east of the Alberta - Saskatchewan border. Elements of the study included a field inspection of compression and metering facilities, service life and net salvage analysis for all accounts. The study was completed in 2002 and was supported through an appearance before the NEB. Study updates have been completed in 2005, 2007, 2009 and an additional full and comprehensive study was completed in 2011, and



2017. The 2011 study was fully supported through an appearance before the NEB in 2012.

Designations and Professional Affiliations

- Society of Depreciation Professionals -Certified Depreciation Professional
- Society of Depreciation Professionals (former President)

**EVIDENCE ENTERED INTO PROCEEDINGS IN THE UNITED STATES**

YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
2015	Alliance Pipeline LP	Alliance Pipeline LP	Federal Energy and Regulatory Commission	Docket No. RP15-1022
2019	Viking Gas Transmission Company	Viking Gas Transmission Company	Federal Energy Regulatory Commission	RP19-1340
2020	National Grid USA Service Company Limited	National Grid USA Service Company Limited	Federal Energy Regulatory Commission	Settled through Negotiation
2018	Great Plains Natural Gas Co.	Great Plains Natural Gas Co.	Minnesota Department of Commerce	Annual Depreciation Filing
2018	Montana-Dakota Utilities	Montana-Dakota Utilities	Montana Public Service Commission	Docket D2019.9
2019	Great Plains Natural Gas Co	Great Plains Natural Gas Co	Minnesota Department of Commerce	Annual Depreciation Filing
2020	Cascade Natural Gas Corporation	Cascade Natural Gas Corporation	Oregon Public Utility Commission	UM - 2073
2020	Missouri-American Water Company	Missouri-American Water Company	Missouri Public Service Commission	WR-2020-0344
2020	Great Plains Natural Gas Co	Great Plains Natural Gas Co	Minnesota Department of Commerce	Annual Depreciation Filing
2020	Commonwealth Edison Company	Commonwealth Edison Company	State of Illinois – Illinois Commerce Commission	Docket 20-0393
2021	Intermountain Gas Company	Intermountain Gas Company	Idaho Public Utilities Commission	Case No. INT-21-01
2021	Midwestern Gas Transmission Company	Midwestern Gas Transmission Company	Federal Energy Regulatory Commission	RP21-525-000
2021	Consolidated Edison of New York	Consolidated Edison of New York	New York State Public Service Commission	19-G-0066



EVIDENCE ENTERED INTO PROCEEDINGS IN CANADA

YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
1999	ENMAX Power Corporation	Edmonton Power Corporation	Alberta Energy and Utilities Board	980550
2000	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Energy and Utilities Board	Decision 2002-43
2001	City of Calgary	ATCO Pipelines South	Alberta Energy and Utilities Board	2000-365
2001	City of Calgary	ATCO Gas South	Alberta Energy and Utilities Board	2000-350
2001	City of Calgary	ATCO Affiliate Proceeding	Alberta Energy and Utilities Board	1237673
2001	ENMAX Power Corporation	ENMAX Power Corporation - Transmission	Alberta Department of Energy	N/A
2002	Centra Gas British Columbia	Centra Gas British Columbia	British Columbia Utilities Commission	N/A
2002	ENMAX Power Corporation	ENMAX Power Corporation - Transmission	Alberta Department of Energy	N/A
2003	AltaLink LP	AltaLink LP	Alberta Energy and Utilities Board	1279345
2003	Centra Gas Manitoba	Centra Gas Manitoba	Manitoba Public Utilities Board	N/A
2003	City of Calgary	ATCO Pipelines	Alberta Energy and Utilities Board	1292783
2003	City of Calgary	ATCO Electric-ISO Issues	Alberta Energy and Utilities Board	N/A
2003	City of Calgary	ATCO Gas	Alberta Energy and Utilities Board	1275466
2003	City of Calgary	ATCO Electric	Alberta Energy and Utilities Board	1275494
2003	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	N/A
2003	TransCanada Pipelines Limited	TransCanada Pipelines Limited	National Energy Board of Canada	RH-1-2002
2004	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Energy and Utilities Board	1305995
2004	AltaLink LP	AltaLink LP	Alberta Energy and Utilities Board	1336421
2004	Central Alberta Midstream	Central Alberta Midstream	Municipal Government Board of Alberta	N/A
2004	Central Alberta Midstream	Central Alberta Midstream	Municipal Government Board of Alberta	N/A
2004	ENMAX Power Corporation	ENMAX Power Corporation	Alberta Energy and Utilities Board	1306819



YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
2004	Heritage Gas Ltd.	Heritage Gas Ltd.	Nova Scotia Utility and Review Board	N/A
2004	NOVA Gas Transmission Limited	NOVA Gas Transmission Limited	Alberta Energy and Utilities Board	1315423
2004	Westridge Utilities Inc.	Westridge Utilities Inc.	Alberta Energy and Utilities Board	1279926
2005	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Energy and Utilities Board	1378000
2005	ATCO Electric	ATCO Electric	Alberta Energy and Utilities Board	1399997
2005	ATCO Power	ATCO Power	Municipal Government Board of Alberta	N/A
2005	British Columbia Transmission Corporation	British Columbia Transmission Corporation	British Columbia Utilities Commission	N/A
2005	Centra Gas Manitoba	Centra Gas Manitoba	Manitoba Public Utilities Board	N/A
2005	ENMAX Power Corporation	ENMAX Power Corporation – Transmission	Alberta Energy and Utilities Board	N/A
2005	ENMAX Power Corporation	ENMAX Power Corporation – Distribution Assets	Alberta Energy and Utilities Board	1380613
2005	FortisAlberta Inc.	FortisAlberta Inc.	Alberta Energy and Utilities Board	1371998
2005	FortisAlberta Inc.	FortisAlberta Inc.	Alberta Energy and Utilities Board	N/A
2005	FortisBC, Inc.	FortisBC, Inc.	British Columbia Utilities Commission	N/A
2005	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	N/A
2005	New Brunswick Board of Commissioners of Public Utilities	New Brunswick Power Distribution and Customer Service Company	New Brunswick Board of Commissioners of Public Utilities	N/A
2005	Northland Utilities (NWT) Inc.	Northland Utilities (NWT) Inc.	Northwest Territories Utilities Board	N/A
2005	Northland Utilities (Yellowknife) Inc.	Northland Utilities (Yellowknife) Inc.	Northwest Territories Utilities Board	N/A
2005	NOVA Gas Transmission Ltd.	NOVA Gas Transmission Ltd.	Alberta Energy and Utilities Board	1375375
2005	City of Red Deer	City of Red Deer Electric System	Alberta Energy and Utilities Board	1402729
2005	Yukon Energy Corporation	Yukon Energy Corporation	Yukon Utilities Board	N/A



YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
2006	AltaLink LP	AltaLink LP	Alberta Energy and Utilities Board	1456797
2006	BC Hydro	BC Hydro	British Columbia Utilities Commission	N/A
2006	Imperial Oil Resources Ventures Limited	McKenzie Valley Pipeline Project	National Energy Board of Canada	GH-1-2004
2007	Enbridge Pipelines Limited	Enbridge Pipelines Limited	National Energy Board of Canada	RH-2-2007
2007	FortisAlberta Inc.	Fortis Alberta Inc.	Alberta Energy and Utilities Board	1514140
2007	Kinder Morgan	Terasen (Jet fuel) Pipeline Limited	British Columbia Utilities Commission	N/A
2008	ATCO Electric	Yukon Electrical Company Limited	Yukon Utilities Board	N/A
2008	ATCO Gas	ATCO Gas	Alberta Utilities Commission	1553052
2008	City of Lethbridge Electric System	City of Lethbridge	Alberta Utilities Commission	N/A
2008	ENMAX Power Corporation	ENMAX Power Corporation	Alberta Utilities Commission	1512089
2008	Heritage Gas Ltd.	Heritage Gas Ltd.	Nova Scotia Utility and Review Board	N/A
2009	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Utilities Commission	N/A
2009	Fortis Alberta Inc.	Fortis Alberta, Inc.	Alberta Utilities Commission	1605170
2010	ATCO Electric	ATCO Electric	Alberta Utilities Commission	1606228
2010	Enbridge Pipelines Limited - Line 9	Enbridge Pipelines Limited - Line 9	National Energy Board of Canada	N/A
2010	Gazifere	Gazifere	La Regie de L'Energie	R-3724-2010
2010	Kinder Morgan	Kinder Morgan	National Energy Board of Canada	N/A
2010	Pacific Northern Gas	Pacific Northern Gas	British Columbia Utilities Commission	N/A
2011	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Utilities Commission	1606694
2011	AltaLink LP	AltaLink LP	Alberta Utilities Commission	1606895
2011	ATCO Electric	Northland Utilities (NWT) Inc.	Northwest Territories Utility Board	N/A
2011	ATCO Gas	ATCO Gas	Alberta Utilities Commission	1606822
2011	FortisAlberta Inc.	Fortis Alberta Inc.	Alberta Utilities Commission	1607159
2011	FortisBC Energy, Inc.	FortisBC Energy, Inc.	British Columbia Utilities Commission	3698627



YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
2011	GazMetro	GazMetro	La Regie de L'Energie	R-3752-2011
2011	Heritage Gas Ltd.	Heritage Gas Ltd.	Nova Scotia Utility and Review Board	N/A
2011	Qulliq	Qulliq	Utilities Rates Review Council	N/A
2011	SaskPower	SaskPower	Internal Review Committee	N/A
2011	TransAlta Utilities Corporation	TransAlta Utilities Corporation	Municipal Government Board of Alberta	N/A
2012	City of Red Deer	City of Red Deer	Alberta Utilities Commission	1608641
2012	Enbridge Gas Distribution Inc.	Enbridge Gas Distribution Inc.	Ontario Energy Board	EB 2011-0345
2012	FortisBC, Inc.	FortisBC, Inc.	British Columbia Utilities Commission	3698620
2012	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	2013/2013 GRA
2012	Newfoundland and Labrador Hydro	Newfoundland and Labrador Hydro	Newfoundland and Labrador Board of Commissioners of Public Utilities	N/A
2012	Northwest Territories Power Corporation	Northwest Territories Power Corporation	Northwest Territories Public Utilities Board	N/A
2012	TransCanada Pipelines Limited	TransCanada Pipelines Limited	National Energy Board of Canada	RH-003 -2011
2013	AltaLink LP	AltaLink LP	Alberta Utilities Commission	1608711
2013	IntraGaz Incorporated	IntraGaz Incorporated	La Regie de L'Energie	R-3807-2012
2013	Yukon Electrical Company Limited (YECL)	Yukon Electrical Company Limited (YECL)	Yukon Utilities Board	2013-2015 GRA
2014	Enbridge Gas Distribution	Enbridge Gas Distribution	Ontario Energy Board	EB-2012-0459
2014	ENMAX Power Corporation	ENMAX Power Corporation	Alberta Utilities Commission	1609674
2015	AltaLink LP	AltaLink LP	Alberta Utilities Commission	Proceeding 3524
2015	EPCOR Distribution & Transmission	EPCOR Distribution & Transmission	Alberta Utilities Commission	Proceeding 20407
2015	FortisBC Energy, Inc.	FortisBC Energy, Inc.	British Columbia Utilities Commission	N/A
2015	FortisBC, Inc.	FortisBC, Inc.	British Columbia Utilities Commission	N/A
2015	GazMetro	GazMetro	La Regie de L'Energie	N/A



YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
2015	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	2014/15 & 2015/16 GRA
2015	Newfoundland and Labrador Hydro	Newfoundland and Labrador Hydro	Newfoundland and Labrador Board of Commissioners of Public Utilities	N/A
2016	ATCO Electric	ATCO Electric	Alberta Utilities Commission	Proceeding 20272
2017	NALCOR	NALCOR	Newfoundland Public Utilities Board	Settled
2017	TransCanada Pipelines Limited – Mainline Facilities	TransCanada Pipelines Limited – Mainline Facilities	National Energy Board of Canada	RH-1-2018
2017	TransCanada Pipelines Limited – NGTL Facilities	TransCanada Pipelines Limited – NGTL Facilities	National Energy Board of Canada	RH-001-2019
2018	WestCoast Transmission System	WestCoast Transmission System	National Energy Board of Canada	Settled
2018	ATCO Electric	ATCO Electric	Alberta Utilities Commission	Proceeding 24195
2018	ATCO Gas	ATCO Gas	Alberta Utilities Commission	Proceeding 24188
2018	SaskEnergy Inc.	SaskEnergy Inc.	Saskatchewan Review Board	N/A
2018	SaskPower	SaskPower	Saskatchewan Review Board	N/A
2018	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Utilities Commission	Proceeding 24161
2018	AltaLink LP	AltaLink LP	Alberta Utilities Commission	Proceeding 23848
2018	FortisBC Energy Inc.	FortisBC Energy Inc.	British Columbia Utilities Commission	N/A
2018	FortisBC Inc.	FortisBC Inc.	British Columbia Utilities Commission	N/A
2019	Capital Power Corporation	Capital Power Corporation	Municipal Government Board of Alberta	N/A
2019	TransAlta Corporation	TransAlta Corporation	Municipal Government Board of Alberta	N/A
2019	Trans Mountain Pipeline ULC	Trans Mountain Pipeline ULC	Canadian Energy Regulator	T260-2019-04-01
2019	NB Power	NB Power	New Brunswick Energy Utility Regulator	Pending
2019	ATCO Electric	ATCO Electric Transmission	Alberta Utilities Commission	Proceeding 24964



YEAR	CLIENT	APPLICANT	REGULATORY BOARD	PROCEEDING NUMBER
2020	Enbridge Pipelines Inc.	Enbridge Pipelines Inc.	Canada Energy Regulator (CER)	RH-001-2020
2020	Commonwealth Edison Company	Commonwealth Edison Company	State of Illinois – Illinois Commerce Commission	Docket 20-0393
2021	Ontario Power Generation	Ontario Power Generation	Ontario Energy Board	N/A
2021	AltaLink L.P	AltaLink L.P	Alberta Utilities Commission	Proceeding 26059