

BEFORE THE  
STATE OF NEW JERSEY  
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF  
NEW JERSEY-AMERICAN WATER COMPANY, INC.  
FOR APPROVAL OF INCREASED TARIFF RATES AND  
CHARGES FOR WATER AND WASTEWATER SERVICE,  
CHANGE IN DEPRECIATION RATES,  
AND OTHER TARIFF MODIFICATIONS

BPU Docket No. WR2401\_\_\_\_\_

**Direct Testimony of**  
**LARRY E. KENNEDY**

January 19, 2024

**Exhibit P-14**

NEW JERSEY-AMERICAN WATER COMPANY, INC.

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1           **INTRODUCTION, SUMMARY AND PRESENTATION OF WITNESSES**

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

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

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

6       A. I am employed by Concentric Energy Advisors, Inc.

7   **3. Q. What is your position with Concentric Energy Advisors, Inc. (“Concentric”)?**

8       A. I am employed by Concentric as a Senior Vice President.

9   **4. Q. On whose behalf are you submitting this Direct Testimony?**

10      A. I am submitting this Direct Testimony before the New Jersey Board of Public Utilities  
11      (the “Board” or “BPU”) on behalf of New Jersey-American Water Company, Inc.  
12      (“NJAWC” or the “Company”).

13   **5. Q. Are you sponsoring any exhibits to your testimony?**

14      A. Yes. I am sponsoring the following Schedules:

15      Schedule LEK-1\_2023 Depreciation Study – Water Assets

16      Schedule LEK-2\_2023 Depreciation Study - Wastewater Assets

17   **6. Q. Please describe your education and experience.**

18      A. I am a Certified Depreciation Professional, with over 40 years of regulatory plant  
19      accounting and depreciation experience, and 22 years of depreciation and plant  
20      accounting consulting to the regulated utility industry. I have advised numerous energy

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1 and utility clients on a wide range of accounting, property tax and utility depreciation  
2 matters. Many of these assignments have included the determination of appropriate  
3 annual depreciation accrual rates. I have included my resume and a summary of  
4 testimony that I have filed in other proceedings as Appendix A.

5 **7. Q. Please describe Concentric's activities in energy and utility engagements.**

6 A. Concentric provides financial and economic advisory services to many and various  
7 energy and utility clients across North America. Our regulatory, economic, and market  
8 analysis services include utility ratemaking and regulatory advisory services; energy  
9 market assessments; market entry and exit analysis; corporate and business unit  
10 strategy development; demand forecasting; resource planning; and energy contract  
11 negotiations. Our financial advisory activities include buy and sell-side merger,  
12 acquisition and divestiture assignments; due diligence and valuation assignments;  
13 project and corporate finance services; and transaction support services. In addition,  
14 we provide litigation support services on a wide range of financial and economic issues  
15 on behalf of clients throughout North America.

16 **PURPOSE AND OVERVIEW OF DIRECT TESTIMONY**

17 **8. Q. What is the purpose of your Direct Testimony?**

18 A. The purpose of my Direct Testimony is to set forth the results of the full and  
19 comprehensive depreciation studies, performed by me and under my direction, of the  
20 water and wastewater plant in service of the Company, as of December 31, 2022. My  
21 detailed reports, including my analyses and recommendations, are provided in  
22 Schedule LEK-1\_2023 Depreciation Study – Water Assets and Schedule LEK-2\_2023

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1 Depreciation Study – Wastewater Assets. The detailed depreciation study reports were  
2 prepared by me or under my direction.

3 **9. Q. Please provide a brief overview of the analyses that led to your depreciation**  
4 **recommendations.**

5 A. In preparing the depreciation study reports, I analyzed the historic plant account data  
6 of NJAWC to prepare an analysis of the Company’s past retirement experience. I met  
7 with the Company’s management and operations representatives to determine the  
8 extent to which the historic indications would be reflective of the future retirement  
9 patterns. Additionally, I completed site tours of the Canal Road Water Treatment Plant  
10 and the Environmental Disposal Corporation Wastewater Treatment Plant to observe  
11 the assets in service. I also reviewed the average service life and net salvage indications  
12 of many North American based water and wastewater utilities to test the results of my  
13 analysis against the water industry peers.

14 **10. Q. How is the remainder of your Direct Testimony organized?**

15 A. Section III provides a background on utility depreciation, depreciation methods and  
16 procedures. Next, Section IV provides the scope of my study and a summary of my  
17 analyses and conclusions. This section also includes a discussion of the major causes  
18 of changes in the depreciation accrual rate and amounts as compared to the last study.  
19 Finally, Section V provides concluding comments.

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**DEPRECIATION METHODS AND PROCEDURES**

**11. Q. How is depreciation defined for a rate regulated utility?**

A. Depreciation defined – “Depreciation, as applied to depreciable water plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of water plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities”.<sup>1</sup> When considering the action of the elements, my average service life recommendations have considered large catastrophic events that have occurred and impacted the life estimates of utility assets across North America through our use of peer analysis. The average service life of utilities has been influenced by events including forest fires, earthquakes, tornadoes, ice storms, wind storms, large scale flooding, fires, actions of third parties and other natural forces of nature. These forces of retirement should be included in the determination of the average service life.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing water and wastewater system utility service. Normally, the period of time over which the

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<sup>1</sup> Federal Energy Regulatory Commission, Part 101, Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act, Definitions.

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1 fixed capital cost is allocated to the cost of service is equal to the period of time over  
2 which an item renders service, that is, the item's service life. The most prevalent method  
3 of allocation is to distribute an equal amount of cost to each year of service life. This  
4 method is known as the Straight-Line Method of depreciation, which was adopted for  
5 use in my studies.

6 **12. Q. Please outline the depreciation methods and procedures used in your depreciation**  
7 **studies.**

8 A. The calculation of annual and accrued depreciation, based on the Straight-Line Method,  
9 requires the estimation of survivor curves and the selection of group depreciation  
10 procedures, as discussed below.

11 Depreciation Grouping Procedures - When more than a single item of property is under  
12 consideration, a group procedure for depreciation is appropriate because normally all  
13 of the items within a group do not have identical service lives but have lives that are  
14 dispersed over a range of time. There are two primary group procedures, namely, the  
15 Average Life Group and Equal Life Group procedures.

16 In the Average Life Group Procedure, the rate of annual depreciation is based on the  
17 average service life of the group. This rate is applied to the surviving balances of the  
18 group's cost. A characteristic of this procedure is that the cost of plant retired prior to  
19 average life is not fully recouped at the time of retirement, whereas the cost of plant  
20 retired subsequent to the average life is more than fully recouped. Over the entire life

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1 cycle, the portion of cost not recouped prior to average life is balanced by the cost  
2 recouped subsequent to average life.

3 In the Equal Life Group Procedure, also known as the Unit Summation Procedure, the  
4 property group is subdivided according to service life. That is, each equal life group  
5 includes that portion of the property which experiences the life of that specific group.  
6 The relative size of each equal life group is determined from the property's life  
7 dispersion curve. The calculated depreciation for the property group is the summation  
8 of the calculated depreciation based on the service life of each equal life unit. In the  
9 determination of the depreciation rates in these studies, the use of the Average Service  
10 Life Procedure has been continued.

11 Amortization accounting is used for certain general plant accounts because of the  
12 disproportionate plant accounting effort required in these accounts. Many regulated  
13 utilities in North America have received approval to adopt amortization accounting for  
14 these accounts. The water and wastewater studies both calculate the annual and accrued  
15 depreciation using the Straight-Line Method and Average Life Group Procedure for  
16 most accounts. For certain general plant accounts, the annual and accrued depreciation  
17 are based on amortization accounting. Both types of calculations were based on original  
18 cost, attained ages and estimates of service lives. Variances between the calculated  
19 accrued depreciation and the book accumulated depreciation are amortized over the  
20 composite remaining life of each account within the remaining life calculations.  
21 Amortization accounting has been continued in these studies in a manner largely  
22 consistent with the prior studies.



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1 A detailed account by account analysis of the factors considered in the selection of my  
2 recommended average service life estimates is provided in Section 3.1.6 of the Water  
3 and Wastewater depreciation study reports.

4 **13. Q. Please outline any changes that you made in the depreciation method, grouping**  
5 **procedures or remaining life calculations as compared to previous depreciation**  
6 **studies.**

7 A. The depreciation rates calculated in these studies were calculated on the same manner  
8 as used in the prior full depreciation studies – i.e. using the Straight-Line Method, the  
9 Average Life Group Procedure was applied on a remaining life basis. Further, the  
10 underlying calculations related to the annual accrual amounts for all accounts have not  
11 changed in these depreciation studies. However, the calculation of the composite  
12 remaining life for the account as a whole has been slightly modified in these  
13 depreciation studies. This does not impact the annual depreciation accrual amount or  
14 rate calculations.

15 The previous depreciation studies calculated the composite remaining life by dividing  
16 the sum of all annual accrual amounts by the net book value for the account as a whole.  
17 As such, the composite remaining life was an output of the depreciation calculations  
18 not an input into the depreciation formula. These depreciation studies calculate the  
19 remaining life of the account through the weighted average original cost amount.

20 The differences in the remaining life can be seen in a simple example. The former  
21 method calculates the composite remaining life in the following manner:

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	Original Cost	Accumulated Depreciation	Net Book Value	Remaining Life	Annual Accrual
2018	2,857,428	1,191,301	1,666,127	6.43	259,044
2019	478,978	162,500	316,478	7.10	44,597
2020	9,760,197	2,478,973	7,281,224	7.83	930,362
2021	3,366,596	538,766	2,827,830	8.63	327,661
2022	1,596,419	89,778	1,506,641	9.52	158,282
Total	18,059,618	4,461,318	13,598,300		1,719,946

1 The previous depreciation studies would have calculated the remaining life to be equal  
2 to  $\$13,598,300/\$1,719,946 = 7.91$  years.

3 The current depreciation studies require a more detailed calculation for the remaining  
4 life. The original cost for each vintage is multiplied by remaining life for that vintage.

5 This number is then summed and divided by the total original cost for the account as a  
6 whole. In the above example, the remaining life calculations are as follows:

	Original Cost	Accumulated Depreciation	Net Book Value	Remaining Life	Annual Accrual	Weighted Remaining Life
2018	2,857,428	1,191,301	1,666,127	6.43	259,044	18,373,263
2019	478,978	162,500	316,478	7.10	44,597	3,400,742
2020	9,760,197	2,478,973	7,281,224	7.83	930,362	76,422,342
2021	3,366,596	538,766	2,827,830	8.63	327,661	29,053,723
2022	1,596,419	89,778	1,506,641	9.52	158,282	15,197,909
Total	18,059,618	4,461,318	13,598,300		1,719,946	142,447,978

7 The Concentric model calculates the remaining life to be  $\$142,447,978/\$18,059,618 =$   
8  $7.89$  years. As in the example, the difference in composite remaining life is generally  
9 very small between the two methods and there is no difference in the underlying annual  
10 accrual calculation. Both methods use the same depreciation formulas to calculate the  
11 annual accrual amount.

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1 **14. Q. Was there any change to the remaining life by vintage as used in the depreciation**  
2 **studies?**

3 A. Yes. The previous depreciation studies utilized a minimum remaining life of one year  
4 for all vintage accrual calculations. I recommend the use of a three-year minimum  
5 remaining life for these studies to ensure there is no over-recovery related to vintages  
6 at the very end of their life.

7 **15. Q. Are there any other changes to the procedure used in these depreciation studies?**

8 A. Yes. Historically the depreciation accruals for a number of water accounts at the  
9 following locations have been depreciated using the Units of Production procedure:

- 10 • DR Pipe
- 11 • DR Treatment
- 12 • Logan Beckett
- 13 • Logan Purelands
- 14 • How Ground
- 15 • Logan Birch Creek
- 16 • How Surf

17 The remainder of the NJAWC system has historically calculated depreciation accrual  
18 amounts based on straight line depreciation, as discussed above. The straight line  
19 method provides greater generational equity to all users of the system when long term  
20 throughput is relatively consistent and is widely approved throughout North America.

21 The Units of Production procedure calculates the annual depreciation accrual amount  
22 by dividing the expected annual throughput of a location by the total expected

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1 throughput that a location will experience over its total expected life. As the annual  
2 throughput may be higher or lower than average in any given year, the Units of  
3 Production procedure is known to result in either accelerated or decelerated  
4 depreciation accrual amounts. Further, the depreciation calculations are based upon  
5 both estimates of annual throughput and total future throughput. Consequently,  
6 effective use of the Unit of Production procedure, requires a high degree of certainty in  
7 the reliability of estimates for throughput many years in the future. Given that the future  
8 estimates for future demand are difficult to forecast with a high degree of reliability,  
9 continued use of the Units of Production procedure may result in a less accurate  
10 depreciation estimate than using a more traditional straight line approach.

11 Concentric recommends that NJAWC utilize the straight-line depreciation method and  
12 the Average Life Group procedure for all assets going forward. This change will result  
13 in greater accounting efficiency, improved generational equity, and more reliable  
14 depreciation accrual amounts. It is anticipated that there will be minimal impact to  
15 customers from this change.

16 **SCOPE AND SUMMARY RESULTS OF THE DEPRECIATION STUDIES**

17 **16. Q. Please outline the Scope of the Depreciation Studies.**

18 A. Concentric's depreciation study reports set forth the results of the depreciation studies  
19 for the water and wastewater assets of NJAWC, to determine the annual depreciation  
20 accrual rates and amounts for book purposes applicable to the original cost of  
21 investment, as of December 31, 2022. The rates and amounts are based on the Straight-  
22 Line Method, incorporating the Average Life Group Procedure applied on a Remaining

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1 Life Basis. These studies also describe the concepts, methods and judgments which  
2 underlie the recommended annual depreciation accrual rates related to the NJAWC  
3 water and wastewater assets in service, as of December 31, 2022.

4 **17. Q. Please outline the information included in your depreciation study reports.**

5 A. Both the Water and Wastewater depreciation study reports are presented in nine (9)  
6 sections outlined as follows:

- 7 • Section 1 Study Highlights, presents a summary of the depreciation study and  
8 results.
- 9 • Section 2 Introduction, contains statements with respect to the plan and the  
10 basis of the study.
- 11 • Section 3 Development of Depreciation Parameters, presents descriptions of  
12 the methods used and factors considered in the service life study.
- 13 • Section 4 Calculation of Annual and Accrued Depreciation presents the  
14 methods and procedures used in the calculation of depreciation.
- 15 • Section 5 Results of Study, presents summaries by depreciable group of  
16 annual and accrued depreciation in Table 1.
- 17 • Section 6 Retirement Rate Analysis
- 18 • Section 7 Net Salvage Calculations
- 19 • Section 8 Detailed Depreciation Calculations
- 20 • Section 9 Estimation of Survivor Curves, is an overview of Iowa curves and  
21 the Retirement Rate Analysis.

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1 **18. Q. Were the depreciation studies prepared using generally accepted standard**  
2 **methods and practices?**

3 A. Yes. Previous depreciation studies completed for NJAWC utilized a widely accepted  
4 method for the studies of the Company's historic data, known as the Retirement Rate  
5 Analysis Method. The Retirement Rate Analysis Method is generally accepted as the  
6 correct method to use when aged data is available for review. The aged data used in the  
7 last studies, through December 31, 2016, was available to be incorporated into our  
8 database.

9 Additional reliable aged data, for the period January 1, 2017 through to December 31,  
10 2022, was provided by the Company and incorporated in our database. Given the  
11 availability of reliable aged data, we prepared the historic studies of mortality history  
12 using the retirement rate method. A detailed discussion of the retirement rate analysis  
13 is presented in Section 9 of our depreciation study reports.

14 Additionally, the service life studies included:

- 15 • a review of NJAWC company practice and outlook, as they relate to plant  
16 operation and retirement;
- 17 • consideration of current practice in the water or wastewater system industry,  
18 including knowledge of service life estimates used for other regulated water and  
19 wastewater system companies; and
- 20 • informed professional judgment which incorporated analyses of all of the above  
21 factors.

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1 My studies of the net salvage percentages were based on detailed studies prepared  
2 under the standard approach, which has commonly become known as the “Traditional  
3 Method”. Within this method, the net salvage transactions (gross salvage proceeds, re-  
4 use salvage and costs of removal or retirement) are compared to the original cost of the  
5 item being retired. The analysis is prepared on an actual transaction year basis, for as  
6 many years as reliable data is available. The analysis then includes a series of 3-year  
7 rolling average bands, 5-year rolling average bands, and life to date bands covering all  
8 years of transactional data.

9 As described later, the depreciation accrual rates presented herein are based on  
10 generally accepted methods and procedures for calculating depreciation.

11 **19. Q. Please provide a summary of the results of the depreciation studies.**

12 The water study results in a depreciation rate related to Structures and Improvements  
13 of 1.93%, Purification, Transmission, and Distribution of 2.27%, and a depreciation  
14 rate related to general plant of 8.50% for a total composite depreciation rate of 2.58%.

15 The wastewater study results in a depreciation rate related to Structures and  
16 Improvements of 2.33%, and a depreciation rate related to Collecting, Treatment, and  
17 General Plant of 2.17% for a total composite depreciation rate of 2.19%.

18 **20. Q. How do the above depreciation rates compare to the currently approved**  
19 **depreciation rates?**

20 A. The following chart outlines the proposed changes by functional group for water assets:

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<b>Functional Group For Water</b>	<b>Currently Used</b>	<b>Proposed</b>
Structures and Improvements	2.07 %	1.93%
Collection, Transmission and Distribution	2.24%	2.27%
General Plant	7.38%	8.50%
Total	2.50%	2.58%

1 The following chart outlines the proposed changes by functional group for wastewater  
2 assets:

<b>Functional Group For Wastewater</b>	<b>Currently Used</b>	<b>Proposed</b>
Structures and Improvements	2.36%	2.33%
Collection, Transmission and Distribution	1.93%	2.17%
Total	1.98%	2.19%

3

4 **21. Q. Please outline the reasons for the change in the composite depreciation rate.**

5 A. Depreciation rates are composed of the return of initial investment and the return of  
6 future net salvage. One significant cause of the change in depreciation rates is the  
7 change in average service life of many accounts. As the previous depreciation studies  
8 were approved in a negotiated settlement agreement, which approved depreciation rates  
9 instead of depreciation parameters, it is unknown what the average service life  
10 estimates underlying the depreciation rates were. The following is a summary of the  
11 proposed average service life estimates compared to the previously proposed average  
12 service life estimates. This demonstrates a shortening of the average service life  
13 estimate in 16 accounts, a lengthening in 23 accounts, and no change in 58 accounts.



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Water Accounts		2016	
Account	Account Description	Proposed Curves	Recommended
304.1	Source of Supply	60-R2	55-S0
304.2	Pumping	75-S1	70-R2
304.3	Water Treatment	75-S1	70-R2
304.31	Structures and Improvements - Treatment - Handl	N/A	70-R2
304.4	Transmission & Distribution	50-R1.5	45-S0.5
304.5	General	35-R1.5	30-R1.5
304.6	Offices	50-R1	45-S0
304.61	HVAC	N/A	45-S0
304.7	Stores, Shop, & Garage	50-R2.5	50-R2.5
304.8	Miscellaneous	40-S1.5	40-S1.5
305	Collecting and Impounding Reservoirs	90-S3	90-S1
306	Lake, Rivers, and Other Intakes	55-R3	55-R3
307	Wells and Springs	50-R1.5	50-R3
308	Infiltration Galleries and Tunnels	70-R2.5	70-R2.5
309	Supply Mains	85-S1.5	82-S1.5
310.1	Power Generation Equipment	45-R3	47-R4
310.2	Boiler Plant Equipment	25-R2.5	30-R2.5
311.2	Pumping Equipment - Electric	43-R1.5	45-R3
311.3	Pumping Equipment - Diesel	43-R1.5	45-R3
311.4	Pumping Equipment - Hydraulic	43-R1.5	45-R3
311.5	Pumping Equipment - Other	43-R1.5	45-R3
311.53	Pumping Equipment - Water Treatment	N/A	45-R3
311.54	Pumping Equipment - T&D	N/A	45-R3
320.1	Water Treatment Equipment -Non-Media	60-S0	60-S0
320.2	Water Treatment Equipment -Filter Media	9-S1	10-S0.5
330	Distribution Reservoirs and Standpipes	70-R2.5	72-R2
331.01	Mains	120-R2.5	105-R3
332	Fire Mains	70-R2.5	65-S0.5
333	Services	75-R2.5	70-R2.5
334.1	Meters	15-S1	12-S0
334.2	Meter Installations	20-R3	60-R3
334.3	Meter Vaults	20-R3	40-S0.5
335	Fire Hydrants	70-R3	60-R2
336	Backflow Prevention Devices	40-S2.5	40-S2.5
339.1	Other P/E - Intangible	30-R3	30-R3

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Water Accounts		2016	
Account	Account Description	Proposed Curves	Recommended
339.2	Other P/E - Supply	30-R3	30-R3
339.3	Other P/E - Treatment	50-R2.5	50-R2.5
339.4	Other P/E - WT Res Hand Equip	40-R3	45-R3
339.5	Other P/E - Transmission and Distribution	35-R3	20-R3
339.6	Comprehensive Planning Studies	5-SQ	5-SQ
340.1	Office Furniture	20-SQ	20-SQ
340.2	Computer & Peripheral Equipment	5-SQ	8-SQ
340.3	Computer Software	10-SQ	10-SQ
340.31	Computer Software - Mainframe	8-SQ	8-SQ
340.5	Other Office Equipment	15-SQ	15-SQ
341.001	Transportation Equipment - Not Classified		15-L2
341.1	Light Trucks	10-L2	10-L2
341.2	Heavy Trucks	13-L2.5	15-L2
341.3	Cars	10-S0.5	10-S0.5
341.4	Other	20-S2.5	20-S2.5
342	Stores Equipment	25-SQ	25-SQ
343	Tools, Shop, and Garage Equipment	25-SQ	25-SQ
344	Laboratory Equipment	20-SQ	20-SQ
345	Power Operated Equipment	20-R2	25-R2.5
346	Communication Equipment	15-SQ	15-SQ
346.1	Communication Equipment - Non-Telephone	15-SQ	15-SQ
346.19	Remote Control & Instrument	15-SQ	15-SQ
346.2	Communication Equipment - Telephone	15-SQ	15-SQ
347	Miscellaneous Equipment	25-SQ	25-SQ
348	Other Tangible Property	25-SQ	25-SQ

1

Wastewater Accounts		2016	
Account	Account Description	Proposed Curves	Recommended
354.2	Collection	35-S0	40-R2.5
354.3	Pumping	35-S0	40-R2.5
354.4	Treatment	35-S0	40-R2.5
354.5	General	35-S0	35-R2
354.51	General – Capital Lease	35-S0	35-R2

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Wastewater Accounts			
Account	Account Description	2016 Proposed Curves	Recommended
355.2	Power Generation Equipment – Collection	25-R2.5	25-R2.5
355.4	Power Generation Equipment - Treatment	25-R2.5	25-R2.5
360	Collection Sewers – Force Mains	65-R2.5	60-R2.5
361.1	Collection Sewers – Gravity Mains	80-R2.5	80-R3
362	Special Collecting Structures	50-R3	50-R3
363	Services – Sewer	65-R2.5	60-R1
364	Flow Measuring Devices	35-S1	35-S1
370	Receiving Wells	30-R1.5	35-R1.5
371.1	Pumping Equipment – Electric	20-S0.5	25-S0.5
371.2	Pumping Equipment – Other	20-S0.5	25-S0.5
371.3	Pumping Equipment – Miscellaneous	20-S0.5	25-S0.5
380.0	Treatment and Disposal Equipment	27-R1.5	27-R1.5
380.05	T&D Equipment – Grit Removal	27-R1.5	27-R1.5
380.1	T&D Equipment – Sedimentation Tanks & Access.	27-R1.5	27-R1.5
380.2	T&D Equipment – Sludge & Effluent Removal	27-R1.5	27-R1.5
380.25	T&D Equipment – Sludge Dig Tank	27-R1.5	27-R1.5
380.3	T&D Equipment – Sludge Drying & Filtering	27-R1.5	27-R1.5
380.35	T&D Equipment – Secondary Treatment Filters	27-R1.5	27-R1.5
380.4	T&D Equipment – Aux. Effluent Treatment	27-R1.5	27-R1.5
380.45	T&D Equipment – Other Sewer Removal	27-R1.5	27-R1.5
380.5	T&D Equipment – Chemical Treatment Plant	27-R1.5	27-R1.5
380.6	T&D Equipment – Other	27-R1.5	27-R1.5
381	Plant Sewers	50-R2.5	50-R2.5
382	Outfall Sewer Lines	40-R3	40-R3
389.1	Other Plant and Miscellaneous Equipment – Intangibles	20-S3	20-S3
389.2	Other Plant and Miscellaneous Equipment – Collection	30-R2.5	25-R3
389.6	Other Plant and Miscellaneous Equipment – CPS	10-S5	10-S5
390	Office Furniture and Equipment	20-SQ	20-SQ
390.2	Office Furniture and Equipment – Computers and Periphery Equipment	5-SQ	5-SQ
391	Transportation Equipment	11-L3	11-L2

NEW JERSEY-AMERICAN WATER COMPANY, INC.

Wastewater Accounts			
Account	Account Description	2016 Proposed Curves	Recommended
391.2	Transportation Equipment – Heavy Duty Trucks	15-L3	18-L3
393	Tools, Shop, and Garage Equipment	25-SQ	25-SQ
394	Laboratory Equipment	20-SQ	20-SQ
395	Power Operated Equipment	23-L2.5	25-L3
396	Communication Equipment	15-SQ	15-SQ
397	Miscellaneous Equipment	25-SQ	25-SQ
398	Other Tangible Property	25-SQ	25-SQ

1           The specific reasons for the average service life changes for each of the large accounts  
2           are discussed in Section 3.6 of our reports. Additionally, the results of the statistical  
3           mortality study are presented for each account, in Section 6 of our reports.

4   **22. Q. Are the average service life changes, as noted above, typical for utility assets?**

5           A. Yes. In a number of recent depreciation studies that I have completed, I have noted that  
6           the average service life of many asset classes is lengthening throughout North America.  
7           While there are a number of factors causing this lengthening of life estimates, the most  
8           prevalent reason is the increased focus of utilities in maintaining and life extending the  
9           infrastructure. Likewise, I have noted that the life of water line assets has also benefited  
10          from enhanced technology and the pro-active maintenance programs undertaken by  
11          water utilities.

12          At the same time that there has been a trend towards lengthening average service lives  
13          for some asset classes, it has been common throughout North America for there to be  
14          a shortening in other asset classes. The quickening pace of technological change in  
15          some industries results in a trend towards average service life decreases. For example,

NEW JERSEY-AMERICAN WATER COMPANY, INC.

1 the pace of technological change in metering assets has resulted in the life of metering  
2 classes to be shortened industry wide. The move from analogue meters to digital meters  
3 using first generation communication technology, and now to modern two-way  
4 communication technology has resulted in meters having a significantly shorter life  
5 now than they did historically.

6 As such, the average service life changes as observed in these studies are consistent  
7 with my observations in a number of other water utilities. Again, although my Direct  
8 Testimony does not discuss the changes in depreciation rates in detail, the water and  
9 wastewater depreciation studies denoted Sch. LEK-1 and Sch. LEK-2 do so and explain  
10 fully the assumptions behind the changes in those rates.

11 **CONCLUDING REMARKS**

12 **23. Q. What is your conclusion with respect to NJAWC's proposed Depreciation**  
13 **expense?**

14 A. My conclusion is that the Company's requested depreciation rates, resulting in a  
15 composite depreciation rate of 2.58% for water assets and 2.19% for wastewater assets,  
16 reasonably reflects the annual consumption of the undepreciated service value of the  
17 utility plant in service. The use of the depreciation rates as presented in my report, by  
18 account, will provide for an appropriate amount of depreciation expense in the  
19 Company's revenue requirement. Therefore, I recommend that the proposed  
20 depreciation rates set forth in the depreciation studies that I prepared for this  
21 proceeding, be adopted by the Commission for regulatory purposes as well as by the  
22 Company for financial reporting purposes.

NEW JERSEY-AMERICAN WATER COMPANY, INC.

1 **24. Q. Does this conclude your Direct Testimony?**

2 A. Yes, it does.



## LARRY E. KENNEDY, CDP

Senior Vice President

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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.

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## 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

- 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 in 2015 for submission to the FERC (Docket No. RP15-1022-000) 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.
- 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.

- **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.
- **Enbridge Lakehead System:** A Technical Update to a 2016 full depreciation study was prepared and filed with the FERC in 2021 in support of updating depreciation rate and resultant depreciation expense. The technical update also included an analysis and recommendation of a 20-year Economic Planning Horizon (Economic Life).
- **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 and to the North Dakota Public Service Commission in 2022. 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.
- **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)
- **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**

<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
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	Enbridge Lakehead System	Enbridge Lakehead System	Federal Energy Regulatory Commission	DO21-15-000
2021	Consolidated Edison of New York	Consolidated Edison of New York	New York State Public Service Commission	19-G-0066
2022	United Illuminating Company	United Illuminating Company	Connecticut Public Utilities Regulatory Authority	22-08-08
2022	Montana-Dakota Utilities	Montana-Dakota Utilities	North Dakota Utilities Commission	Case No. PU-22-194
2022	Evergy Missouri West	Evergy Missouri West	Evergy Missouri West	ER-2022-0130
2022	Evergy Missouri West	Evergy Missouri West	Evergy Missouri West	ER-2022-0155



<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
2022	Northern Natural Gas Company	Northern Natural Gas Company	Federal Energy Regulatory Commission	RP22-1033-0000
2023	Indiana American Water Company	Indiana American Water Company	Indiana Utility Regulatory Commission	Cause No. 45870
2023	Kentucky American Water Company	Kentucky American Water Company	Commonwealth of Kentucky Public Service Commission	Case No. 2022-00299
2023	Kentucky American Water Company	Kentucky American Water Company	Commonwealth of Kentucky Public Service Commission	Case No. 2023-00191
2023	DCR Transmission, L.L.C.	DCR Transmission, L.L.C	Federal Energy Regulatory Commission	ER23-2309-000
2023	Montana-Dakota Utilities	Montana-Dakota Utilities	Public Service Commission of the State of Montana	2022.11.099
2023	Montana-Dakota Utilities	Montana-Dakota Utilities	South Dakota Public Utilities Commission	NG23
2023	Virginia American Water Company	Kentucky American Water Company	Commonwealth of Kentucky Public Service Commission	Case No. 2023-Pending

**EVIDENCE ENTERED INTO PROCEEDINGS IN CANADA**

<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
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



<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
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
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





<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
2005	ENMAX Corporation Power	ENMAX Corporation Power - Transmission	Alberta Energy and Utilities Board	N/A
2005	ENMAX Corporation Power	ENMAX Corporation Power - 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
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 Corporation Power	ENMAX Corporation Power	Alberta Utilities Commission	1512089



<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
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
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



<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
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
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



<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
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
2020	Enbridge Pipelines Inc.	Enbridge Pipelines Inc.	Canada Energy Regulator (CER)	RH-001-2020
2021	Ontario Power Generation	Ontario Power Generation	Ontario Energy Board	N/A
2021	AltaLink L.P	AltaLink L.P	Alberta Utilities Commission	Proceeding 26059
2022	Enbridge Gas Inc.	Enbridge Gas Inc.	Ontario Energy Board	EB-2022-0200
2022	IntraGaz LP	IntraGaz LP	La Regie de L'Energie	R-4189-2022
2022	BC Hydro	BC Hydro	British Columbia Utilities Commission	Project 1599243
2022	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	Manitoba Hydro 2023/24 & 2024/25 General Rate Application
2023	Pacific Northern Gas	Pacific Northern Gas	British Columbia Utilities Commission	Application No. PNG NE2023 to 2024 RRA



<b>YEAR</b>	<b>CLIENT</b>	<b>APPLICANT</b>	<b>REGULATORY BOARD</b>	<b>PROCEEDING NUMBER</b>
2023	ENMAX Corporation Power	ENMAX Corporation Power	Alberta Utilities Commission	Proceeding 27581