

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

In re: Application of Pennsylvania-American Water :
Company under Sections 1102(a) and 1329 of the :
Pennsylvania Public Utility Code, 66 Pa C.S. § :
§ 1102(a) and 1329, for approval of (1) the transfer, by :
sale, to Pennsylvania-American Water Company, of : Docket No. A-2022-3037047 *et al.*
substantially all of the assets, properties and rights :
related to the wastewater collection and treatment :
system owned by the Butler Area Sewer Authority, (2) :
the rights of Pennsylvania-American Water Company to :
begin to offer or furnish wastewater service to the :
public in the City of Butler, and portions of the Borough :
of East Butler, and portions of the Townships of Butler, :
Center, Connoquenessing, Oakland, and Summit, in :
Butler County, Pennsylvania :

**DIRECT TESTIMONY OF
JEROME C. WEINERT, PE, ASA, CDP
UTILITY VALUATION EXPERT
SELECTED BY
PENNSYLVANIA-AMERICAN WATER COMPANY**

Date: February 14, 2023

PAWC Statement No. 4

DIRECT TESTIMONY OF JEROME C. WEINERT

1 **Q. Please state your name, business address, and occupation.**

2 **A.** My name is Jerome C. Weinert. My business address is 8555 West Forest Home Avenue,
3 Suite 201, Greenfield, WI 53228. I am a Principal and Director of Weinert Appraisal and
4 Depreciation Services, LLC (“WAD Consultants”). This testimony was prepared by me.

5
6 **Q. Please describe your qualifications and indicate if you are registered as a Utility
7 Valuation Expert with the Pennsylvania Public Utility Commission.**

8 **A.** My curriculum vitae (“CV”) is attached to my report and this testimony. **PAWC Exhibit
9 JCW-1.** WAD Consultants is a registered Utility Valuation Expert with the Pennsylvania
10 Public Utility Commission (“PUC”). We obtained that registration in 2022 and we applied
11 for our renewal December 28, 2022 which was approved on February 8, 2023.

12
13 **Q. What is the purpose of your testimony?**

14 **A.** This direct testimony provides clarification and explanation of the appraisal I provided to
15 Pennsylvania-American Water Company (“PAWC”), the Acquiring Utility pursuant to 66
16 Pa. C.S. § 1329(a)(5) and in accordance with the Uniform Standards of Professional
17 Appraisal Practice (“USPAP”) (2020-2021 Edition). The Appraisal Foundation extended
18 the applicability of the 2020-2021 Edition until December 31, 2023.

19
20 **Q. Are you advocating for any party or outcome?**

21 **A.** No. The Ethics Rule of the USPAP, applicable here pursuant to 66 Pa. C.S. § 1329(a)(3),
22 requires that I perform the appraisal with impartiality, objectivity, and independence, and
23 without accommodation of personal interests. In addition, the USPAP Ethics Rule requires

DIRECT TESTIMONY OF JEROME C. WEINERT

1 that I not perform the assignment with bias, that I must not advocate the cause or interest
2 of any party or issue and that I must not accept an assignment that includes the reporting
3 of predetermined opinions and conclusions.

4
5 **Q. Do you have any affiliation with either the Selling Utility or the Acquiring Public**
6 **Utility or Entity?**

7 **A.** No. Other than the current assignment to provide the subject appraisal and several other
8 appraisal projects in process, I have no business or personal relationships with any party to
9 the proposed acquisition.

10
11 **Q. What is your fee arrangement to deliver the appraisal?**

12 **A.** A copy of the fee arrangement is included with the Application as **Appendix A-7.1**. In
13 summary, WAD Consultants are to receive \$20,500 plus expenses in compensation for our
14 appraisal. It must be noted that the appraisal work was started while I was employed by
15 AUS Consultants.

16
17 **Q. Will you receive that fee regardless of whether the Commission approves the**
18 **proposed transaction or whether it closes?**

19 **A.** Yes. 66 Pa. C.S. § 1329(a)(3) mandates that I comply with the USPAP when developing
20 my appraisal. Under the USPAP, I cannot perform the appraisal with bias and acceptance
21 of a fee contingent on a particular outcome like closing or Commission approval would
22 violate that Ethics Rule.

23

DIRECT TESTIMONY OF JEROME C. WEINERT

1 **Q. Have you prepared any exhibits, schedules, or appendices to accompany your direct**
2 **testimony?**

3 **A.** Yes. The appraisal I submitted to the Acquiring Utility pursuant to Section 1329(a)(5) is
4 included in the Application as **Appendix A-5.1**. The appraisal includes a narrative and
5 supporting exhibits in sections. All were prepared under my supervision and control. Also,
6 as stated above, attached to this testimony as **PAWC Exhibit JCW-1** is my CV.

7
8 **Q. Please summarize your results of the application of the cost, market, and income**
9 **approaches to valuation.**

10 **A.** The summary results of the cost, income, and market approaches is presented below.

11

Appraisal Approach	Value Indicator	Weight	Wtd Value Indicator
Cost	\$ 240,895,239	50%	120,447,620
Income	\$ 259,277,679	40%	103,711,072
Market	\$ 220,195,730	10%	22,019,573
Appraisal Conclusion			\$ 246,178,265

12

13
14 **Q. Please describe any assumptions, extraordinary assumptions, hypothetical**
15 **conditions, and/or limiting conditions that you applied to the valuation.**

16 **A.** The major assumptions and limiting conditions used in preparing our appraisal of the Butler
17 Area Sewer Authority's ("BASA's") wastewater collection and treatment system are
18 described in our appraisal report "Fair Market Appraisal Report of Butler Area Sewer
19 Authority's (PA) Wastewater Collection System and Treatment System, as of October 11,

DIRECT TESTIMONY OF JEROME C. WEINERT

1 2022.” Beyond the above-described assumptions, there are no extraordinary¹ or
2 hypothetical² assumptions (as defined in the 2020-2021 edition of USPAP).

3

4 **Q. How was each assumption used and what was its result?**

5 **A.** The assumptions are detailed in my appraisal report and are discussed further in this
6 testimony.

7

8 **Q. How did you develop the weighting applied to each approach in your appraisal and
9 why are the individual weights you chose appropriate for this proposed transaction?**

10 **A.** For the cost approach I chose a weighting of 50%. It is my opinion that this weighting is
11 appropriate for the cost approach because the major purpose of this appraisal is to be an
12 input to the Commission’s establishment of cost for future ratemaking and the cost
13 approach conclusion is directly reflective of the property cost.

14 For the market approach, I chose a weighting of 10%. It is my opinion that this
15 weighting is appropriate for the market approach because, while the market approach
16 provides some information as to the value of the property, establishing comparability
17 between the individual sales to the subject property is difficult and uncertain, therefore
18 requiring less weight for the market approach. The 10% weight accomplishes that
19 objective.

¹ “Extraordinary assumption: an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser’s opinions or conclusions”. 2020-2021 USPAP page 4.

² “Hypothetical condition: a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but used for the purpose of analysis”. 2020-2021 USPAP page 4.

DIRECT TESTIMONY OF JEROME C. WEINERT

1 For the income approach, I chose a weighting of 40%. It is my opinion that this
2 weighting is appropriate for the income approach because the income approach reflects the
3 value of the property's return to the property's owner. The 40% weight accomplishes that
4 objective.

5

6 **Q. Did you conduct an on-site inspection of the Selling Utility assets, and if so, what was**
7 **its result on the appraisal?**

8 **A.** No.

9

10 **Q. What Utility Earnings Report was used to create the capital structure used in your**
11 **appraisal?**

12 **A.** I used a market required capital structure based on an analysis of the market capital
13 structure analysis (detailed in the Cost of Capital / Required Return portion of our appraisal
14 report). Information used in developing the market capital structure was obtained from
15 financial statistics reported in Value Line Investment Survey for the water / wastewater
16 industry published in their October 7, 2022, issue.

17

18 **Q. What capital structure was used in your appraisal?**

19 **A.** The capital structure used in my appraisal is included below.

DIRECT TESTIMONY OF JEROME C. WEINERT

Water and Wastewater Cost of Capital							
Third Quarter 2022 (10-01-2022)							
As an Investor-Owned Utility							
Weighted Cost of Capital (Discount Rate)							
(1)	(2)	(2a)	(3)	(3a)	(4)	(4a)	(5)
	Portion of Capital	Type of Data	Capital Cost	Type of Data	Tax Rate	Tax affect on cost of capital	After-tax Market Capital Cost
	AUS Input		AUS Input				(2)*(3)*(4a)
Debt	32%	Market	5.32%	Market	28.89%	71.11%	1.21%
Equity	68%	Market	9.75%	Market	0.0%	100.0%	6.63%
Total Capital r	100.0%						7.84%
Growth (g)							2.94%
Rate without Growth: $[(1+r)/(1+g)]-1$							4.76%

1

2 **Cost Approach**

3 **Q. Regarding your application of the cost approach, what method did you use to**
 4 **determine the cost approach result (e.g. original cost, replacement cost, reproduction**
 5 **cost)?**

6 **A.** I used the replacement cost method.

7

8 **Q. Please explain why you chose the replacement cost method.**

9 **A.** I chose the replacement cost method because it is considered the proper starting point for
 10 a cost approach. Replacement cost reflects the costs of providing the property's
 11 functionality and capacity at the appraisal date using recognized materials and labor costs.

12

13 **Q. What index did you use for that method?**

14 **A.** I used the Handy Whitman Index of Public Utility Construction Costs for the Water
 15 Industry (Northeastern US Region), AUS Telephone Index (General Plant), and various
 16 United States Bureau of Labor Statistics cost index series.

17

DIRECT TESTIMONY OF JEROME C. WEINERT

1 **Q. Under your application of the cost approach what assets did you value or trend**
2 **differently from other assets and why was that necessary?**

3 **A.** I costed each property account with cost trends appropriate for the property contained in
4 the account. As such, the costing of each property account may differ from account to
5 account. It is my opinion that an accurate appraisal requires each property account be
6 costed with cost trends reflective of the property contained in the account. For the assets
7 associated with Land and Land Rights, appraisal date costs were estimated. For the land
8 associated with BASA's land, appraisal date prices per acre was developed based on recent
9 sales around or near the plant's site. The appraisal date cost of obtaining and registering
10 the easements with the Register of Deeds was based on the time and cost associated with
11 developing the easement, contacting the property owner and registering the easement.

12
13 BASA's property as detailed in the Herbert, Rowland, & Grubic, Inc. Engineers'
14 "Engineer's Assessment" of \$144,573,879 was determined to have a replacement cost new
15 of \$525,923,396 summarized as follows:

DIRECT TESTIMONY OF JEROME C. WEINERT

1	2	3	9	10	13	14	15	16
Pennsylvania American Water Company								
Butler Area Sewer Authority (BASA)								
Wastewater System								
Investor-Owned Utility								
As of October 11, 2022								
Replacement Cost New (RCN)								
(1)	(2)	(3)	(9)	(10)	(13)	(14)	(15)	(16)
Account	Account	Asset Description	Original Cost	Costing Parameter	Cost Translator	Reproduction Cost New (RCN)	Reproduction Cost New (RCN) to Replacement Cost New (COR)	Replacement Cost New (COR)
			OC \$\$			RCN \$\$	COR \$\$ / RCN \$\$	COR \$\$
Input	Input	Input	Input	Input	Calculation	Calculation	Input	Calculation
Eng Assmnt	AUS Input	Borough of Baldwin	Eng Assmnt	AUS Input			AUS Input	Col (14) * (15)
NARUC Code	NARUC Code	Asset Description	Original Cost	Cost Index Table	Translator	RCN	COR / RCN Factor	COR
353.00	353.00	Land & Land Rights	592,540.92	USBLS3	23.772	14,085,768	1.00	14,138,600
354.00	354.00	Structures & Improvements	18,861,944.91	HWW-115	4.237	79,912,801	1.00	79,912,801
354.00	354.30	Structures & Improvements - Pumping	31,007,896.11	HWW-18	1.491	46,218,129	1.00	46,218,129
355.00	355.00	Generating Equipment	590,906.80	USBLS4	1.612	952,830	1.00	952,830
355.00	355.10	Generating Equipment - Pumping	1,112,785.36	USBLS4	1.244	1,384,612	1.00	1,384,612
360.00	360.10	Collection Sewers - Force - Mains - CIP	4,583,561.30	HWW-135	3.370	15,447,522	1.00	15,447,522
361.00	361.10	Collection Sewers - Gravity - Mains	31,448,751.16	HWW-144	5.030	158,177,377	1.00	158,177,377
361.00	361.12	Collection Sewers - Gravity - Mains Relined	568,769.65	HWW-144	35.215	20,029,223	1.00	20,029,223
361.00	361.15	Collection Sewers - Gravity - Mains Relining	10,584,527.19	HWW-138	1.349	14,275,316	1.00	14,275,316
361.00	361.20	Collection Sewers - Gravity - Manholes	7,337,651.29	HWW-145	3.563	26,147,473	1.00	26,147,473
363.00	363.00	Service Laterals	8,568,747.97	HWW-139	5.488	47,022,674	1.00	47,022,674
364.00	364.00	Flow Measuring Devices	300,000.00	HWW-140	2.316	694,650	1.00	694,650
371.00	371.00	Pumping Equipment	467,574.00	HWW-19	3.427	1,602,159	1.00	1,602,159
371.00	371.10	Pumping Equipment	6,954,252.19	HWW-19	6.071	42,215,985	1.00	42,215,985
380.00	380.00	Treatment and Disposal Equipment	15,729,809.83	HWW-117	3.093	48,645,641	1.00	48,645,641
380.00	380.10	Equipment Pump Stations	2,675,250.00	HWW-19	2.036	5,445,824	1.00	5,445,824
390.00	390.10	Office Computer Equipment	43,961.00	AUST-114	0.649	28,524	1.00	28,524
390.00	390.20	Office Printers	43,201.00	AUST-113	1.036	44,755	1.00	44,755
390.00	390.30	Office Equipment	12,178.00	AUST-113	1.020	12,425	1.00	12,425
391.00	391.00	Transportation Equipment	784,172.00	AUST-14	1.133	888,145	1.00	888,145
395.00	395.00	Power Operated Equipment	1,134,169.60	AUST-18	1.293	1,466,657	1.00	1,466,657
396.00	396.00	Communications Equipment	1,111,618.35	USBLS2	0.994	1,104,536	1.00	1,104,536
397.00	397.00	Miscellaneous Equipment	59,611.08	AUST-18	1.133	67,538	1.00	67,538
		Grand Total	144,573,879.71		3.637	525,870,564	1.00	525,923,396

1

2

These results are detailed in the Application **Appendix A-7.1** (WAD Appraisal) under the Cost Approach section.

3

4

5

Q. Under your application of the cost approach, what year-end date did you use for calculating the depreciation or condition of the property?

6

7

A. I used the date of October 11, 2022.

DIRECT TESTIMONY OF JEROME C. WEINERT

1 **Q. How did you determine the depreciation parameters of survival/retirement**
2 **characteristics and service lives for the utility property under the cost approach?**

3 **A.** I determined those parameters based on our review of the depreciation studies filed by
4 PAWC in support of their depreciation parameters (Iowa-type Survival Characteristics and
5 Service Lives) and the resultant depreciation expense and rate base (net book) in their
6 recent General Rate Cases (R-2017-2595853 and R-2020-3019371) and WAD
7 Consultants' experience in preparing depreciation studies for the water and wastewater
8 industry and our experience appraising water and wastewater properties. The following
9 table summarizes those studies and WAD Consultants' review of the depreciation
10 parameters:

DIRECT TESTIMONY OF JEROME C. WEINERT

Summary of PAWC Depreciation Studies Prepared for Rate Case							
Account	Account Description	Iowa Curves		Service Life		Remaining Life	
		12/31/2016	12/31/2019	12/31/2016	12/31/2019	12/31/2016	12/31/2019
				years	years	years	years
354.20	STRUCTURES AND IMPROVEMENTS - COLLECTION	R3	R3	45	45	39.1	33.3
354.30	STRUCTURES AND IMPROVEMENTS - SPP	R2.5	S0	50	55	45.2	32.6
354.40	STRUCTURES AND IMPROVEMENTS - TDP	R2	S0	65	55	56.6	31.7
354.70	STRUCTURES AND IMPROVEMENTS - GENERAL	S1	S1	35	35	33.3	23.2
355.00	POWER GENERATION EQUIPMENT	R2.5	S0.5	35	35	29.7	19.3
360.10	COLLECTION SEWERS - FORCE MAINS	S2	R3	70	75	53.1	52.5
361.10	COLLECTION SEWERS - GRAVITY MAINS	R2.5	R2.5	70	80	56.9	54.8
361.20	MANHOLES	S1.5	S2.5	50	50	41.3	32.2
363.00	SERVICES	R3	R3	38	47	22.9	30.2
364.00	FLOW MEASURING DEVICES	L3	L2.5	20	15	13.3	5.1
365.00	FLOW MEASURING INSTALLATIONS	S1.5	S2	30	25	23.1	10.8
370.00	RECEIVING WELLS	R3	R3	50	50	42.7	33.7
371.00	PUMPING EQUIPMENT	S0	S0.5	40	30	35.5	18.2
380.00	TREATMENT EQUIPMENT	5-R2	S1.5	45	35	37.1	20.1
381.00	PLANT SEWERS	R3	R3	50	50	43.1	32.7
382.00	OUTFALL SEWER LINES	R3	R3	50	50	37.8	28.3
389.10	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - INTANGIBLES	S2.5	S2.5	20	20	13.6	11.3
389.60	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - CPS	SQ	SQ	20	5	12.3	3.5
390.00	OFFICE FURNITURE AND EQUIPMENT	L4	SQ	15	20	9.5	10.1
391.00	TRANSPORTATION EQUIPMENT	SQ	L4	25	14	19.9	9.8
392.00	STORES EQUIPMENT	SQ	SQ	20	25	16.4	17.2
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	SQ	SQ	15	20	11.3	15.4
394.00	LABORATORY EQUIPMENT	L2.5	SQ	16	15	8.7	10.4
395.00	POWER OPERATED EQUIPMENT	SQ	R2	15	22	10.3	13.2
396.00	COMMUNICATION EQUIPMENT	SQ	SQ	15	15	9.6	6.9
397.00	MISCELLANEOUS EQUIPMENT		SQ		15		12.8
398.00	OTHER TANGIBLE PLANT		SQ		25		21.5

1

2

3 **Q. Why are those parameters appropriate?**

4 **A.** Those parameters are appropriate because the parameters reflect the actual service life
 5 experienced by PAWC in serving wastewater customers in the Commonwealth of
 6 Pennsylvania and which were approved by the PUC in the 2017 General Rate Cases and
 7 the 2020 General Rate Cases (Docket Nos. R-2020-3019369 and R-2020-30193371).³ The

³ The depreciation study filed by PAWC in its most recent general rate case at Docket No. R-2022-3031673 did not modify the service life analysis and thus the 2020 depreciation study remains appropriate to use for the cost approach.

DIRECT TESTIMONY OF JEROME C. WEINERT

1 parameters in the following table also reflect WAD Consultants’ experience of the survival
 2 / retirement characteristics of normal and functional service lives of wastewater properties:

9	10	11	12	13	
Pennsylvania American Water Company Butler Area Sewer Authority (BASA) Wastewater System Investor-Owned Utility October 11, 2022					
Summary of Account Costing and Depreciation Parameters Used in the Depreciation Original Cost and the Depreciated Replacement Cost New Studies					
(1)	(2)	(4)	(5)	(6)	
Account Number	Description	(4a) Survivor / Retirement Curve	(4b) Normal Service Life years	(6a) Economic Obsolescence % of CORLD Table	(6b) Tax Depreciation Life
353.00	Land & Land Rights	ZNonDep	0.00	0.00% Non-Depr	0.00
354.00	Structures & Improvements	R4.0	55.00	0.00% MACRS	25.00
354.30	Structures & Improvements - Pumping	R4.0	45.00	0.00% MACRS	25.00
355.00	Generating Equipment	R3.0	35.00	0.00% MACRS	25.00
355.10	Generating Equipment - Pumping	R3.0	35.00	0.00% MACRS	25.00
360.10	Collection Sewers - Force - Mains - CIP	R3.0	75.00	0.00% MACRS	25.00
361.10	Collection Sewers - Gravity - Mains	R2.5	80.00	0.00% MACRS	25.00
361.12	Collection Sewers - Gravity - Mains Relined	R2.5	140.00	0.00% MACRS	25.00
361.15	Collection Sewers - Gravity - Mains Relining	R2.5	60.00	0.00% MACRS	25.00
361.20	Collection Sewers - Gravity - Manholes	R2.5	80.00	0.00% MACRS	25.00
363.00	Service Laterals	R3.0	50.00	0.00% MACRS	25.00
364.00	Flow Measuring Devices	S2.0	30.00	0.00% MACRS	25.00
371.00	Pumping Equipment	R3.0	35.00	0.00% MACRS	25.00
371.10	Pumping Equipment	R3.0	35.00	0.00% MACRS	25.00
380.00	Treatment and Disposal Equipment	R2.0	45.00	0.00% MACRS	25.00
380.10	Equipment Pump Stations	R3.0	35.00	0.00% MACRS	25.00
390.10	Office Computer Equipment	R3.0	8.00	0.00% MACRS	12.00
390.20	Office Printers	R3.0	12.00	0.00% MACRS	12.00
390.30	Office Equipment	R3.0	12.00	0.00% MACRS	12.00
391.00	Transportation Equipment	R3.0	15.00	0.00% MACRS	10.00
395.00	Power Operated Equipment	R3.0	15.00	0.00% MACRS	15.00
396.00	Communications Equipment	R3.0	12.00	0.00% MACRS	12.00
397.00	Miscellaneous Equipment	R3.0	20.00	0.00% MACRS	20.00

3
 4
 5 Also, due the age of BASA’s early property installations the maximum depreciation was
 6 limited to 85% of the cost new.

7
 8 **Q. What was the result of the application of the depreciation parameters to the**
 9 **previously described replacement cost new of \$525,923,396?**

DIRECT TESTIMONY OF JEROME C. WEINERT

1 A. With the application of the above-described depreciation parameters, the replacement cost
 2 new of \$525,923,396 results in a replacement cost new less depreciation of \$240,895,239
 3 determined as follows:

18	19	21	22	23	24	28	29	30	31
Pennsylvania American Water Company									
Butler Area Sewer Authority (BASA)									
Wastewater System									
Investor-Owned Utility									
As of October 11, 2022									
Replacement Cost New less Depreciation (RCNLD)									
(18)	(19)	(21)	(22)	(23)	(24)	(28)	(29)	(30)	(31)
Account	Description	Age at October 11, 2022 Appraisal Date	Replacement Cost New (COR)	Retirement Dispersion Iowa-type	Normal Service Life (NSL)	Normal Remaining Life	Total Life Expectancy	Condition	Preliminary Cost Approach (COR less Normal Depreciation)
		years	COR \$s		years	years	years	% of COR	CORLD \$s
Input	Input	Calculation	Calculation	Input	Input	Calculation	Calculation	Calculation	Calculation
Eng Assmnt	Borough of Baldwin		Col (16)	AUS Input	AUS Input		Col (21) + (28)	Col (28) / (29)	Col (22) * (30)
Account	Description	Age	RCN	Iowa	NL	Rem Life	Total Life	Condition	CORLD
353.00	Land & Land Rights	3.98	14,138,600	ZNonDep	-	-	-	-	14,138,600
354.00	Stuctures & Improvements	40.34	79,912,801	R4.0	55.00	18.92	59.26	55.00	26,702,596
354.00	Stuctures & Improvements - Pumping	9.43	46,218,129	R4.0	45.00	35.63	45.06	45.00	36,625,003
355.00	Generating Equipment	19.77	952,830	R3.0	35.00	17.07	36.83	35.00	443,498
355.00	Generating Equipment - Pumping	11.20	1,384,612	R3.0	35.00	24.55	35.75	35.00	954,182
360.00	Collection Sewers - Force - Mains - CIP	34.25	15,447,522	R3.0	75.00	43.82	78.07	75.00	8,730,174
361.00	Collection Sewers - Gravity - Mains	48.80	158,177,377	R2.5	80.00	38.86	87.65	80.00	71,152,734
361.00	Collection Sewers - Gravity - Mains Relined	90.74	20,029,223	R2.5	140.00	63.22	153.96	140.00	8,227,166
361.00	Collection Sewers - Gravity - Mains Relining	12.88	14,275,316	R2.5	60.00	48.28	61.16	60.00	11,275,266
361.00	Collection Sewers - Gravity - Manholes	48.53	26,147,473	R2.5	80.00	39.61	88.14	80.00	12,072,354
363.00	Service Laterals	54.14	47,022,674	R3.0	50.00	13.67	67.82	50.00	12,204,228
364.00	Flow Measuring Devices	22.02	694,650	S2.0	30.00	11.52	33.54	30.00	240,801
371.00	Pumping Equipment	22.60	1,602,159	R3.0	35.00	14.98	37.58	35.00	640,612
371.00	Pumping Equipment	39.31	42,215,985	R3.0	35.00	8.42	47.73	35.00	10,087,975
380.00	Treatment and Disposal Equipment	30.65	48,645,641	R2.0	45.00	21.85	52.50	45.00	21,299,805
380.00	Equipment Pump Stations	8.22	5,445,824	R3.0	35.00	26.93	35.15	35.00	4,172,881
390.00	Office Computer Equipment	2.85	28,524	R3.0	8.00	5.41	8.26	8.00	18,982
390.00	Office Printers	8.95	44,755	R3.0	12.00	4.44	13.40	12.00	15,309
390.00	Office Equipment	2.38	12,425	R3.0	12.00	9.73	12.11	12.00	9,989
391.00	Transportation Equipment	7.84	888,145	R3.0	15.00	8.00	15.84	15.00	461,896
395.00	Power Operated Equipment	12.73	1,466,657	R3.0	15.00	7.66	20.39	15.00	739,488
396.00	Communications Equipment	7.77	1,104,536	R3.0	12.00	6.84	14.62	12.00	622,435
397.00	Miscellaneous Equipment	3.54	67,538	R3.0	20.00	17.61	21.15	20.00	59,265
4	Grand Total	40.11	525,923,396		61.72	29.07	69.08	45.80	240,895,239

5
 6 This conclusion was tested for economic obsolescence based on the results of the income
 7 and market approaches, which will be described in the remainder of this testimony. Based
 8 on our review of the preliminary cost approach and the results of the income and market
 9 approaches, no economic obsolescence exists at the preliminary cost approach conclusion
 10 of \$240,895,239; therefore, the final cost approach conclusion was determined to be

DIRECT TESTIMONY OF JEROME C. WEINERT

1 \$240,895,239. These results are detailed in the Application **Appendix A-7.1** (WAD
2 Appraisal) under the Cost Approach section.

3

4 **Market Approach**

5 **Q. Regarding your application of the market approach, what methods did you use to**
6 **determine the market approach result?**

7 **A.** I used the comparable sales of water and wastewater properties in the Commonwealth of
8 Pennsylvania subsequent to the passage of Section 1329 and financial market value ratios
9 of publicly traded water and wastewater companies as reported in the October 7, 2022 issue
10 of Value Line Investment Survey.

11

12 **Q. What assumptions, analyses, and/or adjustments did you make under each method?**

13 **A.** Under the comparable sales method, it is my opinion that sales amount to depreciated
14 replacement cost is the best indicator in arriving at the appraised value of physical assets
15 operating as a wastewater collection system. Under the financial ratios method, I believe
16 that an accurate result depends on using the weighted mean of the ratio of the market debt
17 and equity to book debt and equity.

18

19 **Q. What were the results of each analysis you performed?**

20 **A.** The comparable sales analysis produced a result of \$220,195,730 detailed as follows::

DIRECT TESTIMONY OF JEROME C. WEINERT

Pennsylvania American Water Company Butler Area Sewer Authority (BASA) Wastewater System Investor-Owned Utility As of October 11, 2022						
Comparable Sales Approach						
Market Sales Data						
Central Tendency and Reliability Analysis						
Market Sales Analysis - PP/OCLD			Market Sales Analysis - PP/CORLD			
	Simple	Weighted		Simple	Weighted	
All Section 1329 Acquisitions			All Section 1329 Acquisitions			
Mean	1.7632	1.9465	Mean	0.8171	0.8985	
Standard Deviation	0.5729	0.5187	Standard Deviation	0.1812	0.1546	
Median	1.5069	1.5126	Median	0.881	0.9133	
Mode	1.4418	1.4418	Mode	0.6918	0.6918	
Water Treatment & Distribution			Water Treatment & Distribution			
Mean	1.4069		Mean		0.6897	
Median	1.3639		Median		0.628	
Wastewater Collection & Treatment			Wastewater Collection & Treatment			
Mean	1.7972		Mean		0.8536	
Median	1.6166		Median		0.9424	
Wastewater Collection			Wastewater Collection			
Mean	1.8733		Mean		0.8077	
Median	1.4935		Median		0.7548	
Wastewater Treatment Only			Wastewater Treatment Only			
Mean	-0.0761		Mean		0.0459	
Median	0.1231		Median		0.1876	
AUS Conclusion		1.7972	AUS Input Cost Approach - OCLD		0.8536	AUS Input Cost Approach - CORLD
Butler Area Sewer Authority (BASA) OCLD		90,190,859	Butler Area Sewer Authority (BASA) CORLD		240,895,239	
Market Value Indication		162,091,011	Market Value Indication		205,628,176	
Comparable Sales Approach						
Market Sales Analysis - PP/Customer			Financial Basis¹			
	Simple	Weighted	Financial Markets		Market Value per Share to Book Value per Share	
All Section 1329 Acquisitions			Market to Book (equity)		2.89	
Mean	-	7,502	Market to Book (equity and debt)		1.82	
Standard Deviation		5,040				
Median	-	8,492	Use (equity and debt)		1.82	AUS Input
Water Treatment and Distribution						
Mean		6,123				
Median		5,021				
Wastewater Collection & Treatment						
Mean		10,200				
Median		9,572				
Wastewater Collection						
Mean		6,507				
Median		6,636				
Wastewater Treatment Only						
Mean		3,693				
Median		2,936				
Conclusion						
Butler Area Sewer Authority (BASA) Customers		23,372	AUS Input	Butler Area Sewer Authority (BASA) OCLD	90,190,859	Cost Approach - OCLD
Water Treatment and Distribution SPP/Customer		10,200	AUS Input			
Collection and Treatment Customers Market Value Indication		238,394,400	Market Value Indication		164,147,363	
Treatment Only Market Value Indication						
Treatment Only PP/Customer		3,693	AUS Input			
Treatment Only Customers		-	AUS Input			
Market Value Indication Treatment Only						
Total Market Value Indication		238,398,093				
Market Sales Analysis - PP/Cash Flows (EBITDA Period 1-5)			Market Sales Analysis - PP/Cash Flows (EBITDA Period 1-13)			
	Simple	Weighted		Simple	Weighted	
All Section 1329 Acquisitions			All Section 1329 Acquisitions			
Mean	16.89	15.15	Mean	11.43	11.43	
Standard Deviation	6.10	5.15	Standard Deviation	3.20	2.73	
Median	17.18	18.13	Median	11.67	12.27	
Mode	10.79	10.79	Mode	9.55	9.55	
Forecast			Forecast			
Conclusion		18.00	Conclusion		12.00	AUS Input
Water Treatment and Distribution			Water Treatment and Distribution			
Mean	16.06		Mean	9.38		
Median	15.00		Median	7.82		
Wastewater Collection & Treatment			Wastewater Collection & Treatment			
Mean	16.26		Mean	11.28		
Median	17.41		Median	11.91		
Wastewater Collection			Wastewater Collection			
Mean	18.56		Mean	12.77		
Median	16.44		Median	12.65		
Wastewater Treatment Only			Wastewater Treatment Only			
Mean	(2.30)		Mean	(1.49)		
Median	0.97		Median	(0.74)		
Conclusion						
Butler Area Sewer Authority (BASA) Cash Flows		17,584,863	Income Approach	Butler Area Sewer Authority (BASA) Cash Flows	23,491,122	Income Approach
Water Treatment and Distribution		16.26		Water Treatment and Distribution	11.28	
Market Value Indication		285,929,876		Market Value Indication	264,979,858	
Summary of Market Analyses						
Indicators						
OCLD		162,091,011				
CORLD		205,628,176				
Customers		238,398,093				
Cash Flows						
EBITDA Periods 1-5		285,929,876				
EBITDA Periods 1-13		264,979,858				
Value Line		164,147,363				
Mean		220,195,730				
Median		222,013,135				
Conclusion		220,195,730				

DIRECT TESTIMONY OF JEROME C. WEINERT

1

2 **Q. What was your market approach result?**

3 **A.** I used the results of \$220,195,730 because I believe those results represent an accurate
4 assessment and it was based on the relationship of market comparable sales to the
5 replacement cost new less depreciation of those properties. These results are detailed in
6 the Application **Appendix A-7.1** (WAD Appraisal) under the Market Approach section.

7

8

9 **Q. What was the calculation you used to determine your overall market approach**
10 **results?**

11 **A.** I used the weighted mean of the purchase price to replacement cost less depreciation.

12

13 **Q. What comparable transactions or comparable sales did you evaluate to develop your**
14 **market approach?**

15 **A.** I examined the following transactions to develop the result of my market approach:

DIRECT TESTIMONY OF JEROME C. WEINERT

Water and Wastewater System Sales												
Comparable Sales Approach												
Market Sales Data post Section 1329												
RowID	Pennsylvania Public Utility Commission Case	Approximate Date	Buyer	Seller	Type of Purchase Process	County	Type of Facility	Initial Purchase Price	Final Purchase Price ¹	Number of Total Customers	Relationship to the passage of Section 1329	
1	A-2017-2606103	9/1/2016	PA American Water	City of McKeesport		Allegheny	Wastewater Collection and Treatment	156,000,000	159,000,000	21,953	Post	
2	A-2016-2580061	8/1/2016	Aqua PA	New Garden Twp. SA		Chester	Wastewater Collection and Paid for and Owned Treatment	29,500,000	29,500,000	2,106	Post	
3	A-2017-2605434	11/16/2016	Aqua PA	Limerick Township		Montgomery	Wastewater Collection and Treatment System	75,100,000	64,373,378	5,434	Post	
4	A-2018-3001582	12/10/2017	Aqua PA	East Bradford Township		Chester	Wastewater Collection and paid for treatment Capacity	5,000,000	5,000,000	1,248	Post	
5	A-2018-3003519	4/20/2018	SUEZ	Mahoning	Competitive 2 bidders	Carbon	Water Distribution System	4,734,800	4,734,800	1,186	Post	
6	A-2018-3003517	4/20/2018	SUEZ	Mahoning	Competitive 2 bidders	Carbon	Wastewater Collection	4,765,200	4,765,200	1,451	Post	
7	A-2019-3008491	6/1/2018	Aqua PA	Cheltenham	Competitive 3 bidders	Montgomery	Wastewater Collection	50,250,000	50,250,000	10,500	Post	
8	A-2019-3006880	11/14/2018	PA American Water	Steeltown	Competitive 4 bidders	Dauphin	Water Distribution and Treatment	22,500,000	21,750,000	2,325	Post	
9	A-2018-3002437	1/1/2017	PA American Water	Sadsbury		Chester	Wastewater Collection	9,250,000	8,600,000	998	Post	
10	A-2018-3004933	5/28/2018	PA American Water	Exeter		Berks	Wastewater Collection and Treatment	96,000,000	93,500,000	9,000	Post	
11	A-2019-3009052	10/29/2018	Aqua PA	East Norriton	Competitive 3 bidders: Aqu	Montgomery	Wastewater Collection	21,000,000	21,000,000	4,950	Post	
12	A-2019-3014248	9/30/2018	PA American	Kane		McKean	Wastewater Collection and Treatment	17,560,000	17,560,000	2,006	Post	
13	A-2020-3019634	12/10/2019	PA American	Royersford		Montgomery	Wastewater Collection and Treatment	13,000,000	13,000,000	1,596	Post	
14	A-2020-3019859	12/17/2019	PA American	Valley		Chester	Water Treatment and Distribution System	7,325,000	7,325,000	1,459	Post	
15	A-2020-3014248	12/17/2019	PA American	Valley		Chester	Wastewater Collection System	13,950,000	13,950,000	1,644	Post	
16	A-2019-3015173	12/31/2019	Aqua PA	Delaware County Regional Water Quality Authority (DELCORA)		Delaware	Wastewater Collection and Treatment	276,500,000	276,500,000	16,473	Post	
17	A-2020-3021460	4/28/2020	PA American Water	Upper Pottsgrove	Competitive 2 bidders PAWC & Aqua	Montgomery	Wastewater Collection	13,750,000	13,750,000	1,428	Post	
18	A-2021-3024267	9/17/2020	Aqua PA	Lower Makefield	Competitive 3 bidders 2 IOUs AQUA & PAWC & 1 Muni	Bucks	Wastewater Collection and Purchased Treatment Capacity	53,000,000	53,000,000	11,151	Post	
19	A-2021-3026132	1/8/2021	Aqua PA	East Whiteland Township		Chester	Wastewater Collection and Purchased Treatment Capacity	54,930,000	54,930,000	3,918	Post	
20	A-2021-3027268	1/20/2021	Aqua PA	Willistown Township		Chester	Wastewater Collection and Treatment	17,500,000	17,500,000	2,294	Post	
21	A-2021-3024681	4/6/2021	PA American Water	City of York		York	Wastewater Collection and Treatment	235,000,000	235,000,000	15,851	Post	

1

2 **Income Approach**

3 **Q. Regarding your application of the income approach, what method did you use to**
 4 **determine the income approach result?**

5 **A. I used the discounted cash flow method.**

DIRECT TESTIMONY OF JEROME C. WEINERT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Q. What assumptions did you employ to develop your income approach result?

A. Under the income approach, it is my opinion that the results of the future operations of BASA’s wastewater collection and treatment system must be considered. I believe that an accurate result depends on adjusting recent results of the system’s operation to better reflect how those results will migrate over future periods under the operation as a rate regulated wastewater system regulated by the PUC.

Q. What discount rate did you use to calculate your income approach?

A. I used a discount rate of 7.84% and 4.76% capitalization rate.

Q. Please explain how you developed the discount rate.

A. In each case, the discount rate was a market discount rate at the appraisal date and was determined using the weighted average cost of capital (“WACC”) of both debt and equity. The inputs to the WACC determination, capital structure, cost of debt, cost of equity, and income tax rate (state and federal) were determined based on an analysis of Value Line Investment Surveys and the Ibbotson Stock, Bonds, Bills, and Inflation (“Ibbotson SBBI”) 2022 Edition (SBBI activity over the period 1926 through 2021). The cost of debt was determined at October 7, 2021, based on the Value Line Selected Yields publication. The cost of equity was based on the capital asset pricing model (“CAPM”) and the Dividend Growth Model (“DGM”), two recognized cost of equity estimating models and the PUC’s Bureau of Technical Utility Services’ Report on Quarterly Earnings of Jurisdictional Utilities for Year-ending June 30, 2022. The above-described data for BASA’s appraisal

DIRECT TESTIMONY OF JEROME C. WEINERT

1 can be found in the exhibits to my appraisal report in the section entitled Cost of Capital /
2 Required Return.

3

4 **Q. What capital structure inputs differ from those identified in the capital structure set
5 forth earlier in your testimony?**

6 **A.** None. As described in the previous discussion of the capital structure, we utilized a market
7 required capital structure based on analysis of the water / wastewater industry's market
8 capital structure as defined by analysis of market financials as published in Value Line
9 Investment Survey (October 7, 2021). The theory in appraisal is to estimate the value of a
10 property in an arm's length transaction wherein the purchaser finances the purchase with
11 capital (debt and equity) available in the financial markets at the appraisal date. Those are
12 the current (appraisal date) financial markets.

13

14 **Q. What is the source and basis of the alternative input you propose in the income
15 approach?**

16 **A.** As discussed above, we had used Value Line Investment Survey to develop a market
17 required capital structure. Please see Application **Appendix A-7.1** (WAD Appraisal)
18 Income Approach section for the cost of capital of the Income Approach and Cost of
19 Capital / Required Return section for the basis of the Cost of Capital / Required Return.

20

21 **Q. If you used a terminal value in your discounted cash flow analysis what is the number
22 of years over which the cash flows are considered?**

23 **A.** I considered those cash flows over 19 periods with period 20 representing all future periods.

DIRECT TESTIMONY OF JEROME C. WEINERT

1 **Q. What is the basis for using this number of years?**

2 **A.** It is my opinion that the use of 19 periods is a reasonable number of periods for the forecast
3 revenues and expenses to stabilize.

4

5 **Q. What is your Income Approach conclusion?**

6 **A.** WAD Consultants' income approach conclusion was determined to be \$259,277,679
7 detailed as follows:

DIRECT TESTIMONY OF JEROME C. WEINERT

Pennsylvania American Water Company Butler Area Sewer Authority (BASA) Wastewater System Potential Purchaser: Investor-Owned Utility As of October 11, 2022 Discounted Cash Flow Analysis													
Discount Rate:				7.84%									
Capitalization Rate:				4.76%									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Period	Age	Revenues	O&M Expenses	Tax Depreciation	Cash Flow from Operations	Taxable Income before State & Federal Taxes	State and Federal Taxes @ 28.89%	Capital Expenditures	Change in Working Capital	Net Cash Flows	Period Present Worth Factor (PW)	PW of Cashflow	Accumulated PW of Cashflows
					(3)-(4)	(6)-(5)	(7) *28.89%			(3)-(4)-(8)-(9)-(10)		(11)*(12)	Sum (13)
1	0.5	12,752,000	12,830,907	9,178,847	(78,907)	(9,257,754)	(2,674,565)	10,830,864	-	(8,235,206)	0.963	(7,930,503)	(7,930,503)
2	1.5	21,040,800	12,764,804	9,582,429	8,275,996	(1,306,433)	(377,428)	11,075,651	339,841	(2,762,068)	0.893	(2,466,526)	(10,397,029)
3	2.5	21,040,800	12,742,504	10,004,884	8,298,296	(1,706,588)	(493,033)	11,322,571	-	(2,531,242)	0.828	(2,095,868)	(12,492,897)
4	3.5	31,561,200	12,780,373	10,447,070	18,780,827	8,333,757	2,407,622	11,575,526	431,336	4,366,343	0.768	3,353,352	(9,139,545)
5	4.5	31,561,200	12,869,473	10,909,720	18,691,727	7,782,007	2,248,222	11,834,672	-	4,608,833	0.712	3,281,489	(5,858,056)
6	5.5	41,029,560	12,935,902	11,393,593	28,093,658	16,700,065	4,824,649	12,100,168	388,203	10,780,638	0.660	7,115,221	1,257,165
7	6.5	41,029,560	13,047,580	9,982,089	27,981,980	17,999,891	5,200,169	5,660,003	-	17,121,808	0.612	10,478,546	11,735,711
8	7.5	49,235,472	12,914,338	10,161,694	36,321,134	26,159,440	7,557,462	5,702,453	336,443	22,724,776	0.568	12,907,673	24,643,384
9	8.5	49,235,472	12,853,388	10,344,325	36,382,084	26,037,759	7,522,308	5,745,220	-	23,114,556	0.526	12,158,256	36,801,640
10	9.5	54,159,019	12,879,562	10,530,018	41,279,457	30,749,440	8,883,513	5,788,309	201,865	26,405,770	0.488	12,886,016	49,687,656
11	10.5	54,159,019	12,874,551	10,718,808	41,284,468	30,565,659	8,830,419	5,831,721	-	26,622,328	0.453	12,059,914	61,747,570
12	11.5	57,408,560	12,934,011	10,910,732	44,474,549	33,563,817	9,696,587	5,875,459	133,231	28,769,272	0.420	12,083,094	73,830,664
13	12.5	57,408,560	12,977,199	11,022,671	44,431,361	33,408,690	9,651,771	5,919,527	-	28,860,063	0.389	11,226,565	85,057,229
14	13.5	60,853,074	13,117,643	11,219,639	47,735,431	36,515,793	10,549,413	5,963,923	141,225	31,080,870	0.361	11,220,194	96,277,423
15	14.5	60,853,074	13,185,707	11,419,827	47,667,367	36,247,540	10,471,914	6,008,651	-	31,186,802	0.335	10,447,579	106,725,002
16	15.5	64,504,258	13,323,552	11,576,158	51,180,706	39,604,548	11,441,754	6,053,717	149,698	33,535,537	0.310	10,396,016	117,121,018
17	16.5	64,504,258	13,401,365	11,782,049	51,102,893	39,320,844	11,359,792	6,099,119	-	33,643,982	0.288	9,689,467	126,810,485
18	17.5	68,374,513	13,554,963	11,991,261	54,819,550	42,828,288	12,373,093	6,144,863	158,681	36,142,913	0.267	9,650,158	136,460,643
19	18.5	68,374,513	13,776,850	12,203,830	54,597,663	42,393,833	12,247,578	6,190,950	-	36,159,135	0.247	8,931,306	145,391,949
20 and beyond	19.5	72,476,984	13,929,152	12,419,791	58,547,832	46,128,041	13,326,391	6,237,381	168,201	38,815,859	2.934	113,885,730	259,277,679
								151,960,748					
Age				19.5									
PW(Age) = 1/(1+Discount Rate) ^(Age)				0.230				Net Plant		200,273,788			
PW to Perpetuity = 1/Capitalization Rate				12.755				ADIT		(10,143,833)			
PW _(20and Beyond) = PW to Perpetuity * PW Factor _(19.5)				2.934				Rate Base		190,129,955	0.230	43,729,890	189,121,839
								Annual Plant Construction Inflation Rate			0.0422 Input		
								Plant Inflation over 19.5 years		434,582,189	0.230	99,953,903	245,345,852
								PP	231,500,000				
								OCLD	90,190,859				
								PP/OCLD	2,567				
								RCNLD	240,895,239				
								RCNLD/PP		1.040584186			
										197,846,224.88	0.230	45,504,632	190,896,581
								Average					221,160,488

These results are detailed in the Application **Appendix A-7.1** (WAD Appraisal) under the Income Approach section.

Q. What number of Selling Utility customers or equivalent dwelling units did you use to value the Seller's system and how did you develop that number?

DIRECT TESTIMONY OF JEROME C. WEINERT

1 **A.** I used an equivalent dwelling unit count of 23,372 in developing the forecasted revenues
2 and expenses which was provided by PAWC.

3

4 **Q.** **Did you make any updates to your appraisal after it was submitted to the Buyer, and**
5 **if so, what was the update, when was it made, and why was it necessary?**

6 **A.** Yes, AUS Consultants performed a preliminary appraisal in 2021 and WAD Consultants
7 performed its final appraisal once the Engineer's Assessment was completed.

8

9 **Q.** **Does this conclude your direct testimony?**

10 **A.** It does. However, by filing this direct testimony I understand that I may have the
11 opportunity to submit additional testimony responsive to challenges to my appraisal.

Curriculum Vitae (CV) of Jerome C. Weinert, P.E., CDP, ASA

Mr. Weinert is currently Principal and Director of AUS Consultants, Depreciation and Valuation. He has fifty-one (2023-1972) years' experience in valuation and depreciation consulting and management. AUS, with offices across the country, has provided consulting services to the regulated utility industry nationally for over thirty-nine years. A partial list of services provided includes valuations depreciation studies, rate of return studies, cost of service studies, and rate design.

Prior to joining AUS in 1987, Mr. Weinert was employed by American Appraisal Associates, Inc. (American) for sixteen years in their Regulated Industries Group. He held various positions at American, the last being supervising appraiser. Among his other valuation responsibilities, he directed the firm's utility industry capital recovery studies and AUS Consultant's valuation of communication company assets and businesses.

Mr. Weinert graduated from the Milwaukee School of Engineering with a Bachelor of Science degree in Mechanical Engineering and received a master's in business administration from Marquette University. He is a registered professional engineer (1976) (by examination) in the state of Wisconsin as well as a senior member (1982) of the American Society of Appraisers in the public utility valuation field. This latter designation is obtained by written examination primarily in the areas of utility valuation, depreciation, and the economics of regulated firms. He is also a Certified Depreciation Professional (1997) (CDP) and founding member of the Society of Depreciation Professionals and the Society's 1995 President and sponsor of the Society's Certification and re-certification program as such Mr. Weinert developed these programs and oversaw their initial introduction into the Society. He also worked in conjunction with Society members in the development of the Society's training programs which as of 2003 has become the only such formalized depreciation training program in the North America and is an instructor in several of its courses.

During his professional career related to valuations and depreciation matters Mr. Weinert has testified before various courts and public service commissions on these subjects. He has also assisted numerous utilities in preparing capital recovery plans which specifically address the issues of plant replacement. Mr. Weinert has also presented expert testimony on valuation matters. Mr. Weinert has testified before the Pennsylvania Public Utility Commission on regulatory matters associated with Pennsylvania Section 1329 matters. On matters related to eminent domain issues, Mr. Weinert has presented expert testimony in the Massachusetts Superior Court, the Court of Common Pleas, Fayette County, Ohio, the New Hampshire Public Utilities Commission, the Twentieth Judicial Court (deposition only) in Charlotte County, Florida, the Nineteenth Judicial Circuit Court in St. Lucie County, Florida (deposition only). In regard to ad valorem taxation, Mr. Weinert has presented study results to the New York State Board of Equalization and Assessment (now the New York Office of Real Property Services (NY ORPS)), pertaining to useful life and net salvage values for all types of utility property subject to the Board's mass appraisal model. Mr. Weinert has appeared before the Valuation Adjustment Board in Florida for Duval, Hillsborough, Okeechobee, and Palm Beach counties, the Twelfth Judicial Circuit Sarasota County, Florida, the California Board of Equalization and Assessment, the Arizona Board of Assessment, the Missouri Board of Taxation, the Colorado and Texas Departments of Review, the Massachusetts Tax Appeal Court, the Superior Court of the State of Arizona in the County of Maricopa, the State Tax Appeal Board of the State of Montana, the New York City Tax Commission and the Public Utility Commission of Pennsylvania Section 1329 hearings (8).

Mr. Weinert has appeared before regulatory bodies in Alaska, Arkansas, Illinois, Indiana, Iowa, Missouri, Nevada, Nebraska, North Carolina, Ohio, Oregon, Pennsylvania, and South Carolina in support of rate-base valuation determination and capital recovery. He has presented testimony on depreciation matters before the Canadian Radio-Television and Telecommunications Commission (CRTC) and the United

QUALIFICATIONS 1

States Federal Energy Regulatory Commission (FERC). In terms of water and wastewater acquisitions and applications for regulatory approval of rate base Mr. Weinert has testified for two investor-owned acquisitions of municipal wastewater authorities one representing the municipality and secondly for the acquiring investor-owned utility. He has submitted study results to the State Commissions of Alabama, Alaska, Arkansas, Idaho, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, North Carolina, Oregon, Pennsylvania, South Carolina, Washington, and Wisconsin, and the Federal Communications Commission.

Mr. Weinert has presented papers on valuation and depreciation topics to professional and utility industry trade organizations. He also directed AUS Consultants' semi-annual week-long depreciation training programs (1988-1997). These specialized training courses, offered at basic and advanced levels, teach depreciation study techniques to public utility and public service commission staff specialists. The training includes depreciation theory and concepts and hands-on experience with personal computer-based analytical depreciation programs.

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
2022				
AT&T Communications	North America	2021	2022	Ad Valorem Tax Appraisal
AT&T Communications	California	2021	2022	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2021	2022	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2021	2022	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2019	2020	Ad Valorem Tax Appraisal
Verizon New York, Inc.	New York	2019	2020	Ad Valorem Tax Appraisal
2021				
AT&T Communications	North America	2020	2021	Ad Valorem Tax Appraisal
AT&T Communications	California	2020	2021	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2020	2021	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2020	2021	Ad Valorem Tax Appraisal
Lower Makefield, PA	Lower Makefield Wastewater	2021	2021	Fair Market Value 1329
Cozen O'Connor	Egg Harbor, NJ Water &			
Butler Area Sewer Authority, PA	BASA Wastewater	2021	2021	Fair Market Value 1329
2020				
AT&T Communications	North America	2019	2020	Ad Valorem Tax Appraisal
AT&T Communications	California	2019	2020	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2019	2020	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2019	2020	Ad Valorem Tax Appraisal
Verizon New York, Inc.	New York	2019	2020	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2019	2020	Ad Valorem Tax Appraisal
East Norriton Township, PA	East Norriton Wastewater	2019	2020	Fair Market Value 1329
Pennsylvania American Water Company	Kane Wastewater	2019	2020	Fair Market Value 1329
Pennsylvania American Water Company	Royersford Wastewater	2019	2020	Fair Market Value 1329
Pennsylvania American Water Company	Valley Wastewater	2019	2020	Fair Market Value 1329
Pennsylvania American Water Company	Valley Water	2019	2020	Fair Market Value 1329
Lehigh County Authority	Allentown Water & Sewer	2020	2020	Financing
Pennsylvania American Water Company	Upper Pottsgrove wastewater	2020	2020	Fair Market Value 1329
2019				
AT&T Communications	North America	2018	2019	Ad Valorem Tax Appraisal
AT&T Communications	California	2018	2019	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2018	2019	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2018	2019	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2018	2019	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2018	2019	Ad Valorem Tax Appraisal
Cheltenham Township, PA	Cheltenham Wastewater	2018	2019	Fair Market Value 1329
Pennsylvania American Water Company	Steeltown Water	2018	2019	Fair Market Value 1329
Pennsylvania American Water Company	Exeter Wastewater	2018	2019	Fair Market Value 1329

2018**QUALIFICATIONS 3**

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
AT&T Communications	North America	2017	2018	Ad Valorem Tax Appraisal
AT&T Communications	California	2017	2018	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2017	2018	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2017	2018	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2017	2018	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2017	2018	Ad Valorem Tax Appraisal
Level 3 Communications, LLC	North America	2017	2018	Ad Valorem Tax Appraisal
Level 3 Communications, LLC	California	2017	2018	Ad Valorem Tax Appraisal
CenturyLink Communications, LLC	North America	2017	2018	Ad Valorem Tax Appraisal
CenturyLink Communications, LLC	California	2017	2018	Ad Valorem Tax Appraisal
East Bradford Township, PA	East Bradford Wastewater	2018	2018	Fair Market Value 1329
Pennsylvania American Water Company	Sadsbury Wastewater	2017	2018	Fair Market Value Appraisal
Pennsylvania American Water Company Appraisal	Kane Wastewater	2017	2018	Fair Market Value
2017				
AT&T Communications	North America	2016	2017	Ad Valorem Tax Appraisal
AT&T Communications	California	2016	2017	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2016	2017	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2016	2017	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2016	2017	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2016	2017	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2016	2017	Ad Valorem Tax Appraisal
Level 3 Communications	North America	2016	2017	Ad Valorem Tax Appraisal
Level 3 Communications	California	2016	2017	Ad Valorem Tax Appraisal
Whitpain Township, PA	Whitpain Wastewater	2016	2017	Appraisal for Planning
Plymouth Township, PA	Plymouth Wastewater	2016	2017	Appraisal for Planning
East Norriton Township, PA	East Norriton Wastewater	2016	2017	Appraisal for Planning
Pennsylvania American Water Company	Sadsbury Wastewater	2016	2017	Fair Market Value Appraisal
Pennsylvania American Water Company	McKeesport Wastewater	2016	2017	Fair Market Value Appraisal
Intermountain Gas Company	Idaho	2016	2017	Depreciation Study
2016				
AT&T Communications	North America	2015	2016	Ad Valorem Tax Appraisal
AT&T Communications	California	2015	2016	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2015	2016	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2015	2016	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2015	2016	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2015	2016	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2015	2016	Ad Valorem Tax Appraisal
Level 3 Communications	North America,	2015	2016	Ad Valorem Tax Appraisal
Level 3 Communications	California	2015	2016	Ad Valorem Tax Appraisal
New Garden Township, PA	New Garden Wastewater	2016	2016	Fair Market Value Appraisal
2015				
AT&T Communications	North America	2014	2015	Ad Valorem Tax Appraisal
AT&T Communications	California	2014	2015	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2014	2015	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2014	2015	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2014	2015	Ad Valorem Tax Appraisal

QUALIFICATIONS 4

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
Verizon Communications	Florida	2014	2015	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2014	2015	Ad Valorem Tax Appraisal
Level 3 Communications	North America,	2014	2015	Ad Valorem Tax Appraisal
Level 3 Communications	California	2014	2015	Ad Valorem Tax Appraisal
Verizon Wireless	Nationwide	2014	2015	Ad Valorem Tax Appraisal
2014				
AT&T Communications	North America	2013	2014	Ad Valorem Tax Appraisal
AT&T Communications	California	2013	2014	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2013	2014	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2013	2014	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2013	2014	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2013	2014	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2013	2014	Ad Valorem Tax Appraisal
Level 3 Communications	North America,	2013	2014	Ad Valorem Tax Appraisal
Level 3 Communications	California	2013	2014	Ad Valorem Tax Appraisal
Cascade Natural Gas Corporation	Oregon & Washington	2013	2014	Depreciation Study
Intermountain Gas Company	Idaho	2013	2014	Depreciation Study
Virgin Islands Telephone Corporation	US Virgin Islands	2013	2014	Depreciation Study
Verizon Wireless	Nationwide	2013	2014	Ad Valorem Tax Appraisal
2013				
AT&T Communications	North America	2012	2013	Ad Valorem Tax Appraisal
AT&T Communications	California	2012	2013	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2012	2013	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2012	2013	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2012	2013	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2012	2013	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2012	2013	Ad Valorem Tax Appraisal
Verizon Communications	New England - Mass	2012	2013	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2012	2013	Ad Valorem Tax Appraisal
Level 3 Communications	North America, California	2012	2013	Ad Valorem Tax Appraisal
Sprint Nextel Corporation	North America	2012	2013	Ad Valorem Tax Appraisal
Verizon Wireless	Palm Beach, Florida	2012	2013	Ad Valorem Tax Appraisal
Verizon Communications	New England Mass	2002-2007	2013	Ad Valorem Tax Appraisal
2012				
AT&T Communications	North America	2011	2012	Ad Valorem Tax Appraisal
AT&T Communications	California	2011	2012	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2011	2012	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2011	2012	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2011	2012	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2011	2012	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2011	2012	Ad Valorem Tax Appraisal
Verizon Communications	New England - Mass	2011	2012	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2011	2012	Ad Valorem Tax Appraisal
Level 3 Communications	North America, California	2011	2012	Ad Valorem Tax Appraisal
Sprint Nextel Corporation	North America	2011	2012	Ad Valorem Tax Appraisal

QUALIFICATIONS 5

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
Verizon Wireless	Palm Beach, Florida	2011	2012	Ad Valorem Tax Appraisal
MetroPCS	Palm Beach, Florida	2011	2012	Ad Valorem Tax Appraisal
Verizon Communications	Florida - revised	2008	2012	Ad Valorem Tax Appraisal
Verizon Wireless	Palm Beach, Florida	2012	2012	Ad Valorem Tax Appraisal
2011				
AT&T Communications	North America	2010	2011	Ad Valorem Tax Appraisal
AT&T Communications	California	2010	2011	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2010	2011	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2010	2011	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2010	2011	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2010	2011	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2010	2011	Ad Valorem Tax Appraisal
Verizon Communications	New England - Mass	2010	2011	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2010	2011	Ad Valorem Tax Appraisal
Level 3 Communications	North America, California	2010	2011	Ad Valorem Tax Appraisal
Global Crossing	North America	2010	2011	Ad Valorem Tax Appraisal
Intermountain Gas Company	Idaho	2010	2011	Depreciation Study
Sprint Nextel Corporation	North America	2010	2011	Ad Valorem Tax Appraisal
Verizon Wireless	Palm Beach, Florida	2010	2011	Ad Valorem Tax Appraisal
MetroPCS	Palm Beach, Florida	2010	2011	Ad Valorem Tax Appraisal
Verizon Communications	Florida - revised	2008	2011	Ad Valorem Tax Appraisal
Intermountain Gas Company	Idaho	2010	2011	Depreciation Study
Virgin Islands Telephone Corporation	US Virgin Islands	2010	2011	Technical Update of Depreciation Study
2010				
AT&T Communications	North America	2009	2010	Ad Valorem Tax Appraisal
AT&T Communications	California	2009	2010	Ad Valorem Tax Appraisal
AT&T Communications	Florida	2009	2010	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2009	2010	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2009	2010	Ad Valorem Tax Appraisal
AT&T - Southwestern Bell Telephone Company	Arkansas, Kansas, Missouri, Oklahoma, Texas	2009	2010	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2009	2010	Ad Valorem Tax Appraisal
Embarq Missouri, Inc.	Missouri	2009	2010	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2009	2010	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2009	2010	Ad Valorem Tax Appraisal
Verizon Communications	New England - Mass	2009	2010	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2009	2010	Ad Valorem Tax Appraisal
Level 3 Communications	North America, California	2009	2010	Ad Valorem Tax Appraisal
Global Crossing	North America	2009	2010	Ad Valorem Tax Appraisal
MetroPCS	Palm Beach, Florida	2009	2010	Ad Valorem Tax Appraisal
2009				
AT&T Communications	North America	2008	2009	Ad Valorem Tax Appraisal
AT&T Communications	California	2008	2009	Ad Valorem Tax Appraisal

QUALIFICATIONS 6

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
AT&T Communications	Florida	2008	2009	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2008	2009	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2008	2009	Ad Valorem Tax Appraisal
AT&T - Wisconsin Bell Telephone Company	Wisconsin	2008	2009	Ad Valorem Tax Appraisal
AT&T - Southwestern Bell Telephone Company	Arkansas, Kansas, Missouri, Oklahoma, Texas	2008	2009	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2008	2009	Ad Valorem Tax Appraisal
Embarq Texas, Inc.	Texas	2008	2009	Ad Valorem Tax Appraisal
Embarq Missouri, Inc.	Missouri	2008	2009	Ad Valorem Tax Appraisal
Embarq Northwest	Washington	2008	2009	Ad Valorem Tax Appraisal
Embarq Virginia	Virginia	2008	2009	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2008	2009	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2008	2009	Ad Valorem Tax Appraisal
Verizon Communications	New England - Mass	2008	2009	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2008	2009	Ad Valorem Tax Appraisal
Level 3 Communications	North America, California, Michigan & Arizona	2008	2009	Ad Valorem Tax Appraisal
Global Crossing	North America	2008	2009	Ad Valorem Tax Appraisal
AboveNet, Inc	North America/California	2003	2009	Ad Valorem Tax Appraisal
Verizon Wireless	Ohio Properties	2004-2005	2009	Ad Valorem Tax Appraisal
Virgin Islands Telephone Corporation	US Virgin Islands	2008	2009	Depreciation Study
Sprint Nextel Corporation	North America	2008	2009	Ad Valorem Tax Appraisal
2008				
AT&T Communications	North America	2007	2008	Ad Valorem Tax Appraisal
AT&T Communications	California	2007	2008	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2007	2008	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2007	2008	Ad Valorem Tax Appraisal
AT&T - Wisconsin Bell Telephone Company	Wisconsin	2007	2008	Ad Valorem Tax Appraisal
AT&T - Southwestern Bell Telephone Company	Arkansas, Kansas, Missouri, Oklahoma, Texas	2007	2008	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2007	2008	Ad Valorem Tax Appraisal
Embarq Texas, Inc.	Texas	2007	2008	Ad Valorem Tax Appraisal
Embarq Missouri, Inc.	Missouri	2007	2008	Ad Valorem Tax Appraisal
Embarq Northwest	Washington	2007	2008	Ad Valorem Tax Appraisal
Embarq Virginia	Virginia	2007	2008	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2007	2008	Ad Valorem Tax Appraisal
Verizon Communications	California	2007	2008	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2007	2008	Ad Valorem Tax Appraisal
Verizon Communications	New England Mass	2002-2007	2008	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2007	2008	Ad Valorem Tax Appraisal
Level 3 Communications	North America, California, Michigan & Arizona	2007	2008	Ad Valorem Tax Appraisal
Global Crossing	North America	2007	2007	Ad Valorem Tax Appraisal
Intermountain Gas Company	Idaho	2007	2008	Depreciation Study
2007				
AT&T Communications	North America	2006	2007	Ad Valorem Tax Appraisal
AT&T Communications	California	2006	2007	Ad Valorem Tax Appraisal
AT&T - Indiana Bell Telephone Company	Indiana	2006	2007	Ad Valorem Tax Appraisal
AT&T - Michigan Bell Telephone Company	Michigan	2006	2007	Ad Valorem Tax Appraisal

QUALIFICATIONS 7

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
AT&T - Wisconsin Bell Telephone Company	Wisconsin	2006	2007	Ad Valorem Tax Appraisal
Embarq Florida, Inc.	Florida	2006	2007	Ad Valorem Tax Appraisal
Embarq Texas, Inc.	Texas,	2006	2007	Ad Valorem Tax Appraisal
Embarq Missouri, Inc.	Missouri	2006	2007	Ad Valorem Tax Appraisal
Embarq North Carolina	North Carolina	2006	2007	Ad Valorem Tax Appraisal
Embarq Virginia	Virginia	2006	2007	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2006	2007	Ad Valorem Tax Appraisal
Verizon Communications	California	2006	2007	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2006	2007	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	North America	2006	2007	Ad Valorem Tax Appraisal
Qwest Communications Corporation	North America	2006	2007	Ad Valorem Tax Appraisal
	California			
Level 3 Communications	North America, California, Michigan, & Arizona	2006	2007	Ad Valorem Tax Appraisal
Level 3 Communications	Arizona	2002 - 2006	2007	Ad Valorem Tax Appraisal
Global Crossing	North America	2006	2007	Ad Valorem Tax Appraisal
Alaska Communications System, Inc. (ACS)	ACS of Alaska	2006	2007	Depreciation Studies
	ACS of Anchorage			
	ACS of Fairbanks			
	ACS of the Northland			
	ACS Holdings			
Intermountain Gas Company	Idaho	2006	2007	Depreciation Study
2006				
AT&T Communications	Palm Beach Florida	2000 - 2003	2006	Ad Valorem Tax Appraisal
AT&T Communications	North America	2005	2006	Ad Valorem Tax Appraisal
AT&T Communications	California	2005	2006	Ad Valorem Tax Appraisal
Sprint Florida, Inc.	Florida	2005	2006	Ad Valorem Tax Appraisal
Sprint Texas, Inc.	Texas,	2005	2006	Ad Valorem Tax Appraisal
Sprint Missouri, Inc.	Missouri	2005	2006	Ad Valorem Tax Appraisal
Sprint North Carolina	North Carolina	2005	2006	Ad Valorem Tax Appraisal
Sprint Virginia	Virginia	2005	2006	Ad Valorem Tax Appraisal
Embarq Nevada	Nevada	2005	2006	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2005	2006	Ad Valorem Tax Appraisal
Verizon Communications	California	2005	2006	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2005	2006	Ad Valorem Tax Appraisal
Verizon Business (formerly MCI)	Massachusetts	2002-2--5	2006	Ad Valorem Tax Appraisal
Level 3 Communications	North America	2005	2006	Ad Valorem Tax Appraisal
Level 3 Communications	Arizona	2002-2006	2006	Ad Valorem Tax Appraisal
Global Crossing	North America	2005	2006	Ad Valorem Tax Appraisal
Indianapolis Power & Light	IPL	2005	2006	Depreciation Study
2005				
AT&T Communications	North America	2004	2005	Ad Valorem Tax Appraisal
AT&T Communications	California	2004	2005	Ad Valorem Tax Appraisal
Sprint Florida, Inc.	Florida	2004	2005	Ad Valorem Tax Appraisal
Sprint PCS	North America	2004	2005	Ad Valorem Tax Appraisal
Verizon Communications	Florida	2004	2005	Ad Valorem Tax Appraisal
Verizon Communications	California	2004	2005	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2004	2005	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	2004	2005	Ad Valorem Tax Appraisal

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
Level 3 Communications	North America	2004	2005	Ad Valorem Tax Appraisal
Global Crossing	North America	2004	2005	Ad Valorem Tax Appraisal
Global Crossing	New York Special Franchise Property	2003 & 2004	2005	Ad Valorem Tax Appraisal
Indianapolis Power & Light	IPL	2004	2005	Depreciation Study
2004				
Sprint Florida, Inc.	Florida	2003	2004	Ad Valorem Tax Appraisal
Verizon Communications	California	2003	2004	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2003	2004	Ad Valorem Tax Appraisal
Verizon Communications	New England	2003	2004	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	2003	2004	Ad Valorem Tax Appraisal
Level 3 Communications	North America	2003	2004	Ad Valorem Tax Appraisal
Global Crossing	North America	2003	2004	Ad Valorem Tax Appraisal
Sprint PCS	Cost Indexes	2003	2004	Ad Valorem Tax Appraisal
AT&T Communications	North America	2003	2004	Ad Valorem Tax Appraisal
AT&T Communications	California	2003	2004	Ad Valorem Tax Appraisal
Intermountain Gas Company	Idaho	2003	2004	Depreciation Study
2003				
Sprint Florida, Inc.	Florida	2002	2003	Ad Valorem Tax Appraisal
Verizon Communications	California	2002	2003	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2002	2003	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	2002	2003	Ad Valorem Tax Appraisal
Level 3 Communications	North America	2002	2003	Ad Valorem Tax Appraisal
Sprint PCS	Cost Indexes	2002	2003	Ad Valorem Tax Appraisal
AT&T Communications	North America	2002	2003	Ad Valorem Tax Appraisal
AT&T Communications	California	2002	2003	Ad Valorem Tax Appraisal
Global Crossing	North America	2002	2003	Ad Valorem Tax Appraisal
Verizon Wireless	Broward County, FL	1998 through 2002	2003	Ad Valorem Tax Appraisal
2002				
Sprint Florida, Inc.	Florida	2001	2002	Ad Valorem Tax Appraisal
Verizon Communications	California	2001	2002	Ad Valorem Tax Appraisal
Verizon Communications	Northwest	2001	2002	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	2001	2002	Ad Valorem Tax Appraisal
Level 3 Communications	North America	2001	2002	Ad Valorem Tax Appraisal
Global Crossing	North America	2001	2002	Ad Valorem Tax Appraisal
AT&T Wireless	Plymouth, MI	2001	2002	Ad Valorem Tax Appraisal
Sprint PCS	Cost Indexes	2001	2002	Ad Valorem Tax Appraisal
AT&T Communications	North America	2001	2002	Ad Valorem Tax Appraisal
Intermountain Gas Company	Idaho	2001	2002	Depreciation Study
AT&T Communications	California	2001	2002	Ad Valorem Tax Appraisal
2001				
Verizon	Verizon - New York	2001	2001-2	Functional Obsolescence & Useful Life studies for valuation
Sprint Florida, Inc.	Sprint Florida, Inc.	2000	2001	Ad Valorem Tax Appraisal
Verizon Communications	California	2000	2001	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	2000	2001	Ad Valorem Tax Appraisal

QUALIFICATIONS 9

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
Global Crossing	North America	2000	2001	Ad Valorem Tax Appraisal
Sprint PCS	Cost Indexes	2000	2001	Ad Valorem Tax Appraisal
Sprint Corporation	Centel - Nevada	2000	2001-2	Depreciation Study
Alaska Communications System, Inc. (ACS)	ACS of Alaska	2000	2001	Depreciation Study
	ACS of Anchorage			
	ACS of Fairbanks			
	ACS of the Northland			
	ACS Holdings			
2000				
Sprint PCS	BTS Equipment	2000	2000	Economic Life Study
Telus Communications	Telus - Alberta & British Columbia	2000	2000	Depreciation study Phase III Price Caps
Sprint Florida, Inc.	Florida	1999	2000	Ad Valorem Tax Appraisal
Verizon Communications	California	1999	2000	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	1999	2000	Ad Valorem Tax Appraisal
1999				
Sprint Corporation	Centel - Nevada	1998	1999	Depreciation Study
Intermountain Gas Company	Intermountain Gas Company	1998	1999	Depreciation Study
Sprint Florida, Inc.	Florida	1998	1999	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	1998	1999	Ad Valorem Tax Appraisal
1998				
Frontier Corporation	Frontier Telephone of Rochester	1998	1997	Valuation depreciation Lives and Net Salvage Parameters
Pacific Telecom, Inc.	Telephone Utilities of Washington	1997	1998	Depreciation Study
Sprint Florida, Inc.	Florida	1997	1998	Ad Valorem Tax Appraisal
Verizon Communications	Florida	1997	1998	Ad Valorem Tax Appraisal
Sprint Communications, LP	North America	1997	1998	Ad Valorem Tax Appraisal
Sprint Corporation	United Telephone Company of South Carolina	1998	1998	Depreciation Expense Universal Service Fund
Sprint Corporation	Carolina Telephone and Telegraph and Central Telephone of North Carolina	1998	1998	Depreciation Expense Universal Service Fund
Telus Communications	Telus - Edmonton (TCE)	1997	1998	Depreciation Study Phase II Price Caps
1997				
Sprint Corporation	Centel - Nevada	1997	1997	Unbundling/ Inter-connection Depreciation Study
Pacific Telecom, Inc.	Telephone Utilities of Oregon	1996	1997	Depreciation Study

QUALIFICATIONS 10

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
Pacific Telecom, Inc.	Telephone Utilities of Alaska And the Northland	1996	1997	Depreciation Study
Telus Communications	Telus - TCI formerly AGT	1996	1997	Depreciation Study Phase II Price Caps
Indianapolis Power & Light	IPL	1996	1997	Depreciation Study
Sprint Florida, Inc.	Florida	1996	1997	Ad Valorem Tax Appraisal
Verizon Communications	Florida	1996	1997	Ad Valorem Tax Appraisal
Pacific Telecom, Inc.	Eagle Telephone (Colorado)	1996	1997	Depreciation Study
1996				
Intermountain Gas Company	Intermountain Gas Company	1995	1996	Depreciation Study
Sprint Florida, Inc.	Florida	1995	1996	Ad Valorem Tax Appraisal
Century Telephone	Century Telephone of Ohio, Inc.	1995	1996	Depreciation Study
Telus Communications	AGT Limited (Alberta Government Telephones)	1995	1996	Depreciation Study
Johnson County Kansas Office of the Assessor	Useful Life of Computer Equipment	1995	1995	Useful/Market Life Analysis
Milwaukee Metropolitan Sewerage District	Milwaukee Metropolitan Sewerage District	1995	1996	Depreciation Study
Sprint Corporation	Long Distance Division	1995	1995	Depreciation/Recovery Status Study
Sprint Corporation	Cellular Division	1995	1995	Depreciation/Recovery Status Study
Pacific Telecom, Inc.	Alascom, Inc.	1994	1995	Depreciation Study
Pacific Telecom, Inc.	Telephone Utilities of the Northland	1993	1994	Depreciation Study
	Telephone Utilities of Alaska	1993	1994	Depreciation Study
Indiana Energy	Indiana Gas Company	1993	1994	Depreciation Study
Columbia Gas Transmission	Gas Pipeline Property in Sullivan County, NY	1993	1993	Useful Life Study
United Telephone - Midwest Group	United Telephone Company of Missouri	1993	1993	Modernization/ Depreciation Study
Intermountain Gas Co.	Intermountain Gas Co.	1992	1993	Depreciation Study
Pacific Telecom, Inc.	Alascom, Inc.	1992	1993	Depreciation Study

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
	Telephone Utilities of Oregon, Inc.	1991	1992	Depreciation Study
	Telephone Utilities of Washington, Inc.	1991	1992	Depreciation Study
Small Telephone Company Coalition	Oregon Small Telephone Companies	1991	1992	Depreciation Support
United Telephone Systems	United Telephone Co. of Pennsylvania	1991	1992	Instructional Depreciation Study
New York State Division of Equalization and Assessment	Electric, Gas, Water, Telephone, Pipeline, Steam, CATV	1991	1992	Useful Lives and Net Salvage Values
Rochester Telephone Company	Enterprise Telephone	1991	1992	Study Review
Indiana Energy	Indiana Gas/Richmond Gas/ Terre Haute Gas	1990	1991	Depreciation Study
American Electric Power	Indiana/Michigan Power Co.	1990	1991	Depreciation Study
Rochester Telephone Company	Rochester Telephone Co.	1990	1991	Study Review
United Telephone Systems	United Telephone Co. of Florida	1990	1991	Instructional Depreciation Study
United Telephone Systems	United Telephone Co. of Oregon	1989	1990	Study Review
Telephone and Data Systems, Inc.	Quincy Telephone Company	1990	1991	Depreciation Study
Telephone and Data Systems, Inc.	Wolverine Telephone Company	1989	1990	Depreciation Study
Indiana Energy	Indiana Gas Company, Inc.	1989	1990	Depreciation Study
Intermountain Gas Co.	Intermountain Gas Co.	1989	1990	Remaining Life/Net Salvage Support
North-West Telephone Company	North-West Telephone Company	1989	1990	Study Review
United Telephone System	United of Texas	1989	1990	Instructional Depreciation Study
	United of Missouri	1989	1990	Instructional Depreciation Study

QUALIFICATIONS 12

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Year</u>	<u>Study Performed</u>	<u>Year</u>	<u>Activity</u>
Milwaukee Water	Milwaukee Water	1989	1990		Depreciation Study
Indiana Natural Gas Corp.	Indiana Natural Gas Corp.	1989	1990		Depreciation Study
Pacific Telecom	Telephone Utilities of the Northland	1989	1990		Depreciation Study
	Telephone Utilities of Alaska	1989	1990		Depreciation Study
	Alascom	1989	1990		Depreciation Study
	Telephone Utilities of Washington, Inc.	1988	1989		Depreciation Study
WICOR	Wisconsin Gas Company	1988	1989		Depreciation Study
ALLTEL	ALLTEL - Kentucky, Inc.	1987	1989		Depreciation Study
	ALLTEL - Ohio, Inc.	1988	1989		Depreciation Study
	Western Reserve Telephone Company	1988	1989		Depreciation Study
Milwaukee Metropolitan Sewer District	Milwaukee Metropolitan Sewer District	1988	1989		Depreciation Study
United Telephone Telephone Company	United of Ohio Telephone Company	1988 1988	1989 1989		ELG Support ELG Support
United Telecom	U.S. Sprint	1988	1988		Useful Life Study
Pacific Telecom	Telephone Utilities of Oregon	1987	1988		Depreciation Study
	Telephone Utilities of Eastern Oregon	1987	1988		Depreciation Study
	Rose Valley Telephone Company	1987	1988		Depreciation Study
United Telephone	United of Minnesota	1987	1988		Capital Planning Support
Wisconsin Southern Gas	Wisconsin Southern Gas	1987	1988		Depreciation Study
Pacific Telecom	Glacier State Telephone Company	1986	1987		Depreciation Study

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Year</u>	<u>Study Performed</u>	<u>Year</u>	<u>Activity</u>
	Sitka Telephone Co.	1986	1987		Depreciation Study
	Juneau-Douglas Tel Company	1986	1987		Depreciation Study
Pacific Telecom	Telephone Utilities of Alaska	1986	1987		Depreciation Study
	Alascom	1986	1987		Depreciation Study
Lincoln Telecommunications	Lincoln Telephone and Telegraph Company	1986	1987		Digital Switching Service Life
Northwest Natural Gas Corporation	Northwest Natural Gas Corporation	1985	1986		Depreciation Study
ALLTEL	Western Reserve Telephone Company	1984	1985		Depreciation Study
	ALLTEL - Ohio	1984	1985		Depreciation Study
	ALLTEL - Alabama	1984	1985		Depreciation Study
Gulf Telephone Co.	Gulf Telephone Company	1984	1985		Depreciation Study
United Telephone Systems, Inc.	United of Iowa	1984	1985		Depreciation Study
	United of Arkansas	1984	1985		Depreciation Study
Pacific Telecom	Telephone Utilities of Washington	1983	1984		Depreciation Study
	Telephone Utilities of Eastern Oregon	1983	1984		Depreciation Study
Pacific Telecom	Telephone Utilities of Oregon	1983	1984		Depreciation Study
	Northwestern Telephone Systems, Inc., Oregon	1983	1984		Depreciation Study
	Rose Valley Telephone Company	1983	1984		Depreciation Study
United Telecommunications	All United Telephone Companies	1983	1984		Capital Recovery Strategy
Lincoln Telecommunications	Lincoln Telephone & Telegraph Company	1983	1984		Depreciation Study
ALLTEL	ALLTEL - Mississippi	1982	1983		Depreciation Study
	ALLTEL - Michigan	1982	1983		Depreciation Study

Appraisal & Capital Recovery Activities Client List

<u>Company</u>	<u>Property</u>	<u>Study Year</u>	<u>Year Performed</u>	<u>Activity</u>
North Carolina Natural Gas Corp.	North Carolina Natural Gas Corporation	1982	1983	Depreciation Study
Mid Continent Telephone (Currently ALLTEL)	Western Reserve Telephone	1982	1983	Depreciation Study
	Mid Ohio Telephone	1982	1982	Depreciation Study
	Florence Telephone Company	1980	1981	Depreciation Study
	Leeds Telephone Co.	1980	1981	Depreciation Study
	Elmore Coosa Tel Company	1980	1981	Depreciation Study
	Brookville Telephone Company	1980	1981	Depreciation Study
	Mid-Pennsylvania Telegraph	1980	1981	Depreciation Study
Telephone Utilities (Currently Pacific Telecom)	Telephone Utilities of Oregon	1979	1980	Depreciation Study
	Telephone Utilities of Eastern Oregon	1979	1980	Depreciation Study
	Northwestern Telephone Systems, Inc.-Oregon	1979	1980	Depreciation Study
	Rose Valley Telephone Company	1979	1980	Depreciation Study
United Telephone Systems, Inc.	United of Ohio	1979	1980	Depreciation Study
Telephone Utilities	Telephone Utilities of Washington	1978	1979	Depreciation Study
United Telephone Systems, Inc.	United of Ohio	1978	1979	Depreciation Study
Rochester Telephone	Rochester Telephone (Indiana)	1977	1978	Depreciation Study
United Telephone Systems, Inc.	United of Ohio	1977	1978	Depreciation Study
Princeton Telephone	Princeton Telephone (Indiana)	1976	1977	Depreciation Study
Northwestern Telephone	Northwestern Telephone (Illinois)	1975	1976	Depreciation Study

Papers and Seminars

- 2011 Training Instructor Depreciation Basics Sessions A & B and Life and Salvage Analysis
Society of Depreciation Professionals 25th Annual Meeting
Atlanta, GA September 20-22, 2011
- 2010 Will the Real Cost Approach Please Stand Up?
National Association of Property Tax Representatives Transportation, Energy, & Communications (NAPTR-TEC)
Scottsdale, Arizona October 25-27, 2010
- Issues Affecting Assessment of Regulated Industries
Institute for Professionals in Taxation (IPT) Property Tax Symposium
Austin, Texas October 31 – November 3, 2010
- 2009 (Valuing) Intangibles
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas July 28, 2009
- Fair Value Accounting (Appraisal Panelist)
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas July 29, 2009
- 2008 Valuation Issues Valuation of Assets and the Impact of Depreciation
Society of Depreciation Professionals Annual Meeting
Greenville, SC September 21-26, 2008
- Obsolescence in the Long-Distance and Local Transport Networks
Technology Futures Inc. Asset Valuation Conference
Austin Texas February 8, 2008
- 2007 Communications Industry Issues
National Association of Property Tax Representative – Transportation, Energy, & Communications
New Orleans, LA October 30, 2007
- 2006 Appraisal Procedures & Issues in a Changing communications Industry
Florida Chapter International Association of Assessing Officers' Tangible Personal Property Conference
Ocala, Florida January 12, 2006
- Valuation of Intangibles
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas July 25, 2006
- SDP 20 years of History and Beyond
Society of Depreciation Professionals 20th Annual Meeting
Long Beach, CA September 18, 2006
- 2005 Valuation in a World with Asset Impairments
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas August 1, 2005

Papers and Seminars

- 2004 Depreciation in the Valuation of Assets
Society of Depreciation Professionals' Eighteenth Annual Meeting
Washington, D.C., September 13, 2004
- 2003 Cost Approach and the Use of Appraisal Guidelines
Institute for Professionals in Taxation – Property Tax Symposium
Fort Lauderdale, FL, September 17, 2003
- Cost Approach – Obsolescence and Depreciation
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas, July 28, 2003
- 2000 Appraisal Issues Associated with Technological Change in the Wireline Telecommunications Industry
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas, July 31, 2000
- The Impact of Advancing Technology and the Changing Regulatory Environment on Obsolescence
Calculations for Ad Valorem Valuation Purposes
Journal of Property Tax Management, Spring 2000
- 1996 How to Develop a Reproduction/Replacement Cost New Less Depreciation Approach to Value
Appraisal for Ad Valorem Taxation, Wichita State University
Wichita, Kansas, August 4, 1996
- 1995 Valuation Method, Techniques and Strategies (How to Quantify Stranded Investment) (Market, Income,
& Cost Approach
AGA Depreciation Committee Meeting
Denver, Colorado, August 6-9, 1995, jointly presented with Earl Robinson of AUS Consultants
- 1994 Integrating Future Expectations for the Telephone Industry into Historical Depreciation Analysis
United States Telephone Association (USTA's 1994 Capital Recovery Seminar)
Scottsdale, Arizona, September 12-13, 1994
- 1994 Capital Recovery: United States versus Canada
Canadian Telephone Industry's Annual Capital Recovery Seminar
Edmonton, Alberta, Canada June 14-15, 1994
- 1990 Capital Recovery: Methods, Terminology, Procedures, and Record Keeping
United States Telephone Association (USTA)'s
1990 Non-FCC Subject and Small Company Capital Recovery Seminar
Minneapolis, Minnesota April 10_11, 1990
- Integration of Technology Forecasting Into Historical Life Studies
29th Iowa State Regulatory Conference
Ames, Iowa May 15-17, 1990
- The 1990's and the Second Wave of Major Plant Retirements in the Communications Industry
NARUC's Seventh Biennial Information Conference
Columbus, Ohio September 12-14, 1990

Papers and SeminarsHow Do We Incorporate Change into the Study Filing Procedures?

USTA's 1990 Capital Recovery Seminar

Chicago, Illinois October 16_17, 1990

1989

Plant Modernization: Capital Planning and Capital Recovery

Midwest Utilities Conference

Chicago, Illinois September 11_14, 1989

Price Indexes Today: Procedures, Uses, and Misuses

Society of Depreciation Professionals' Third Annual Meeting

New Orleans, Louisiana December 6_7, 1989

1988

Plant Modernization: Capital Planning and Capital Recovery

National Association of Regulatory Utility Commissioners (NARUC)'s

Sixth Biennial Regulatory Information Conference

Columbus, Ohio September 14_16, 1988

Papers and Seminars

- 1997 Sprint Corporation - West Finance Center
Overland Park, Kansas, August 1997
- 1997 Rochester Telephone Corporation
Rochester, New York, April 1997
- 1996 Sprint-Florida-Vista United Telecommunications
Altamonte Springs, Florida August 27-29, 1996
- 1994 Saskatchewan Telecommunications
Regina, Saskatchewan, Canada, June 1994
- 1994 AUS Consultants/Leroy J. Murphy and Associates 1994 Capital Recovery Seminar
May 1994
- 1993 Manitoba Telephone System, Winnipeg, Manitoba, December 1993
- 1993 Society of Depreciation Professionals Annual Meeting
Charleston, South Carolina September 30, 1993
- 1993 SPRINT - Local Telephone Division
Atlanta, Georgia August 11-12, 1993
- 1993 AUS Consultants/Leroy J. Murphy and Associates 1993 Capital Recovery Seminar
Chicago, Illinois May 11 - 13, 1993
- 1993 Canadian Telephone Capital Recovery Seminar
Halifax, Nova Scotia April 20 - 22, 1993
- 1993 United Telephone, Midwest Group
Overland Park, Kansas January 20, 1993
- 1992 BellSouth Corporation
Birmingham, Alabama November 23, 1992
- 1992 Sprint - Local Telephone Division
Kansas City, Kansas November 18 - 20, 1992
- 1992 Society of Depreciation Professionals Annual Meeting
San Antonio, Texas September 9 - 10, 1992
- 1992 AUS Consultants/Leroy J. Murphy and Associates 1992 Capital Recovery Seminar
Chicago, Illinois October 6 - 8, 1992
- 1991 Society of Depreciation Professionals Annual Meeting
Nashville, Tennessee November 20-22, 1991
- 1991 ALLTEL Corporation Microcomputer Depreciation Studies System Training
Hudson, Ohio October 14-16, 1991

Capital Recovery Training

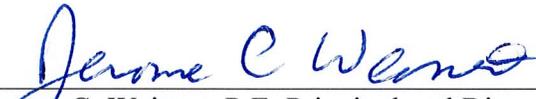
- 2016 Society of Depreciation Professionals
Annual Training
Charleston, South Carolina, September 18-23, 2016
- 2015 Society of Depreciation Professionals
Annual Training
Austin Texas September 2015
- 2014 Society of Depreciation Professionals
Annual Training
New Orleans, Louisiana September 2014
- 2013 Society of Depreciation Professionals
Annual Training
Salt Lake City, Utah September 2013
- 2012 Society of Depreciation Professionals
Annual Training
Minneapolis, Minnesota, September 16-18, 2012
- 1991 United Telecommunications, Inc., Capital Recovery/Microcomputer Depreciation
Studies System Training
Kansas City, Kansas September 23-25, 1991
- 1991 AUS Consultants/Leroy J. Murphy and Associates 1991 Capital Recovery Seminar
Lake Geneva, Wisconsin September 17-19, 1991
- 1991 Rochester Telephone Corporation, Capital Recovery/Microcomputer Depreciation Studies
System Training, Rochester, New York September 3-7, 1991
- 1991 Ameritech Services, Microcomputer Depreciation Studies System Training
Chicago, Illinois May 16-17, 1991
- 1991 AUS Consultants/Leroy J. Murphy and Associates 1991 Capital Recovery Seminar
Washington, D.C. April 9_11, 1991
- 1990 United Telecommunications, Inc., Capital Recovery Seminar
Overland Park, Kansas December 1990
- 1990 AUS Consultants/Leroy J. Murphy and Associates 1990 Capital Recovery Seminar
Chicago, Illinois September 24_27, 1990
- 1990 AUS Consultants/Leroy J. Murphy and Associates 1990 Capital Recovery Seminar
Chicago, Illinois January 29-February 1, 1990
- 1990 United Telecommunications, Inc., Capital Recovery/Microcomputer Depreciation Studies
System Training, Chicago, Illinois July 1990
- 1989 United Telecommunications, Inc., Capital Recovery/Microcomputer Depreciation Studies
System Training, Chicago, Illinois July 1989

Capital Recovery Training

- 1989 AUS Consultants/Leroy J. Murphy and Associates 1989 Capital Recovery Seminar
Chicago, Illinois March 6_9, 1989
- 1988 AUS Consultants/Leroy J. Murphy and Associates 1988 Capital Recovery Seminar
Chicago, Illinois July 25_28, 1988
- 1988 United Telecommunications, Inc., Microcomputer Depreciation Studies System Training
Kansas City, Kansas January 1988

VERIFICATION

I, Jerome C. Weinert, P.E., hereby state that the facts above set forth above are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements made herein are made subject to the penalties of 18 Pa. Cons. Stat. §4904 relating to unsworn falsification to authorities.



Jerome C. Weinert, P.E. Principal and Director
WAD Consultants

Dated: February 9, 2023