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December 10, 2020

VIA ELECTRONIC FILING

Hon. Kenneth C. Hill, Chairman
c/o Ectory Lawless, Docket Room Manager
Tennessee Public Utility Commission
502 Deaderick Street, 4th Floor
Nashville, TN 37243
TPUC.DocketRoom@tn.gov

RE: *Rulemaking Proceeding to Promulgate Rules for the Evaluation of Utility Acquisitions*, TPUC Docket No. 20-00025

Dear Chairman Hill:

Please find attached for filing *Tennessee-American Water Company's Response to Notice of Informal Technical Workshop to Explore Standards for Utility Acquisitions* in the above-captioned docket.

As required, one (1) hard copy will be mailed to your office. Should you have any questions concerning this filing, or require additional information, please do not hesitate to contact me.

Very truly yours,

BUTLER SNOW LLP

Melvin J. Malone

clw
Attachments
cc: Elaine Chambers, TAWC

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BEFORE THE TENNESSEE PUBLIC UTILITY COMMISSION
NASHVILLE, TENNESSEE

RULEMAKING PROCEEDING TO PROMULGATE RULES FOR THE EVALUATION OF UTILITY ACQUISITIONS	**)** **)** **)** **)**	**DOCKET NO. 20-00025**

TENNESSEE-AMERICAN WATER COMPANY'S RESPONSE TO NOTICE OF INFORMAL TECHNICAL WORKSHOP TO EXPLORE STANDARDS FOR UTILITY ACQUISITIONS

Tennessee-American Water Company ("Tennessee-American" or the "Company") files this Response to the Notice of Informal Technical Workshop to Explore Standards for Utility Acquisitions issued in this matter by the Tennessee Public Utility Commission ("TPUC" or the "Commission") on November 30, 2020. Tennessee-American commends the Commission's continued exploration of this important matter and appreciates the opportunity to submit this Response and to participate in the informal technical workshop.[1]

I. Introduction

The Commission's Notice invites the submission of further "[w]ritten proposals, comments on proposals already filed, documentation, computations, analysis, examples, and other helpful information for discussion during the workshop by Friday, December 11, 2020." In addition, when scheduling the informal workshop, the Commission staff requested Tennessee-American to "provide copies of available filings and computations in Excel format related to proposed utility

[1] Tennessee-American submitted written comments and proposed revisions to the Commission's proposed rules on July 8, 2020 (original filing) and July 20, 2020 (substitute filing). In the interest of efficiency and ease of administrative burden, the Company incorporates by reference its July 20, 2020 Comments.

acquisitions in other jurisdictions depicting the 'reproduction cost new less depreciation' (RCNLD) methodology for valuing acquired utility assets." Tennessee-American accordingly submits herewith a sample RCNLD analysis for discussion at the workshop (attached as **Exhibit A**) and an example of an RCNLD calculation filed in support of an acquisition in another jurisdiction (attached as **Exhibit C**).[2]

These materials, and the examples of the average embedded cost methodology submitted by Atmos Energy on December 9, 2020, underscore the importance of permitting utilities the opportunity to support transactions with valuation methodologies that reflect the current value of utility assets. As noted in Tennessee-American's July 20, 2020 Comments, the proposed rules would create a presumption that the addition to the acquiring utility's rate base will be limited to the "net book value."[3] Net book value is defined as original cost less depreciation and less contributions in aid of construction ("CIAC") – the proposed rules thus incorrectly assume that decades-old original costs represent current value absent any consideration of the actual value of contributed property. This means that an acquiring utility that agrees to compensate a selling utility for the actual value of its assets, will likely be unable to recover a substantial portion of that amount in rates. As a result, potential buyers will be dissuaded from offering compensatory prices for utility systems when such an acquisition would serve both the potential seller's existing customers' interests and the public interest. When circumstances warrant the consolidation of Tennessee's smaller water and wastewater systems and the ongoing investment in those systems necessary to ensure the continued provision of safe, adequate and affordable water service to the citizens of

[2] Tennessee-American does not have this document in Excel format.

[3] Tennessee-American Comments at 4.

Tennessee, the presumption that rate base additions will be limited to net book value will discourage those needed investments.

Therefore, while Tennessee-American continues to encourage inclusion of the RCNLD valuation methodology in the Commission's rules, it is essential that in any event the Commission *not* limit additions to the acquiring utility's rate base to net book value. If the Commission is not prepared to incorporate RCNLD and other alternative methodologies into its rules for water and wastewater utilities at this time, Tennessee-American respectfully submits that neither should it incorporate net book value and exclude even the consideration of alternative methodologies. It would be better for the citizens of Tennessee for the Commission to evaluate proposed valuations methodologies in the context of individual proposed acquisitions than to adopt a rule that would discourage the acquisitions needed to consolidate and improve Tennessee's water and wastewater infrastructure.

As set forth in its July 20, 2020 Comments and suggested revisions to the Commission's proposed rules, and as outlined at the July 22, 2020 hearing, Tennessee-American has proposed to replace the proposed rules' "net book value" default ceiling for the valuation of the selling utility's ratemaking rate base with the selling utility's assets' "reproduction cost new less depreciation" ("RCNLD"). Tennessee-American has asserted that the rules should provide that the addition of the acquiring utility's rate base shall be established at the lesser of the negotiated sale price or the RCNLD of the acquired assets. Upon consideration of the comments submitted in this matter by Atmos Energy, Tennessee-American believes the rules should provide that the acquiring utility's rate base should be established at the lesser of the negotiated sale price, the RCNLD of the acquired assets, or the acquiring utility's average embedded cost.

II. Overview of Reproduction Cost New Less Depreciation Methodology

Reproduction cost new less depreciation, or RCNLD, is a calculation of the cost to construct, at current prices, an exact duplicate or replica of the utility assets, without regard to the original sources of funding for those assets, using the same materials, construction standards, design, layout, and quality, net of depreciation. The RCNLD methodology uses the "Handy-Whitman Index of Public Utility Construction Costs" ("Handy-Whitman Index") to derive the current reproduction costs of utility assets. The Handy-Whitman Index is a generally accepted, authoritative publication that is widely recognized in the utility industry as a measure of the value of utility facilities.[4] The Handy-Whitman Index has been published continuously since 1924, and its index numbers are used in the building construction, electric utility construction, gas utility construction, and water utility construction industries. The Handy-Whitman Index provides an index number for each vintage of each asset in a utility system. The index numbers are developed from wage rates and prices prevailing on January 1 and July 1 of each year for each of six geographic regions in the continental United States. In a RCNLD valuation, the index numbers are used to produce a factor that is then used to adjust the original cost of the asset in question to current cost. There are two important aspects of the RCNLD methodology as proposed by

[4] *See, e.g., Indiana Michigan Power Co*., No. 44075, 2013 WL 653036, 303 P.U.R.4th 384 (Ind. U.R.C. Feb. 13, 2013) (referring to the Handy-Whitman Index as a "recognized . . . cost ind[ex]" used in "accepted methodologies" for "property valuation"), *on reconsideration*, No. 44075, 2013 WL 1180842 (Ind. U.R.C. Mar. 14, 2013), and *aff'd sub nom. Indiana Office of Util. Consumer Counselor v. Indiana Michigan Power Co*., 7 N.E.3d 1025 (Ind. Ct. App. 2014); *Order Instituting Rulemaking on the Comm'n's Own Motion to Develop Rules & Procedures to Ensure That Inv'r-Owned Water Utils. Will Not Recover Unreasonable Return on Invs. Financed by Contamination Proceeds*, No. D. 10-12-058, 2010 WL 5650693 (Cal. P.U.C. Dec. 16, 2010) ("The Handy-Whitman index is a widely recognized publication which reflects the costs of different types of utility construction."); • N. Shore Gas Co. the Peoples Gas Light & Coke Co., No. 09-0166, 2010 WL 2375848, at *4 n.1 (Ill. Commerce Comm'n June 2, 2010) ("The Commission has approved the use of the Handy-Whitman Index to trend original cost dollars as a means of establishing valuation for rate-making purposes in numerous cases. Furthermore, the Index is widely recognized in the utility industry as a measure of the value of utility facilities." (quoting N. Illinois Water Corp., 1982 WL 914957 at 5 (Order, Jan. 6, 1982))); *Re Great Falls Gas Co.*, No. 4693, 1959 WL 116959, 29 P.U.R.3d 237 (Mont. D.P.S.R. June 19, 1959) ("Applicant's trended original cost valuation was computed by applying cost indices to the original cost of various items of plant. Indices were taken from the Handy-Whitman Index of Public Utility Construction Costs, long recognized as an authoritative publication on cost trends.").

Tennessee-American. First, the Handy-Whitman Index numbers are not simply inflation factors – they are based on the actual current costs of the labor, materials and equipment used to build and maintain utility systems. This allows the buying and selling utilities to determinate the current value of utility assets. Second, if an asset of the utility to be acquired is fully depreciated, its RCNLD value is zero; this means that there is no "double recovery" when a fully-depreciated asset is replaced after the acquisition.

III. Sample RCNLD Analysis

To illustrate the RCNLD methodology, Tennessee-American has prepared a RCNLD valuation of a hypothetical water system (attached as **Exhibit A**). Dr. Christina Chard, who appeared on behalf of the Company and described the RCNLD method at the July 22, 2020 hearing held in this matter, will be available to discuss this analysis at the informal technical workshop.

As illustrated by the example, valuing utility assets using the RCNLD methodology entails the following steps:

1. The system assets are organized by utility plant account number (Column A) and vintage (Column C).
2. The depreciation rate (Column D) is applied to the original cost (per books) of each asset (Column E) to produce current depreciation (Column F), which is applied to the asset's vintage to produce its accumulated depreciation (Column G).
3. Accumulated depreciation (Column G) is then subtracted from the original cost (per books) of each asset (Column E) to produce the depreciated original cost (DOC) value (Column H).
4. The depreciated original cost (DOC) value (Column H) is then multiplied by the reproduction cost new factor (RCN Factor) (Column I) derived from the Handy-Whitman Index numbers for that asset and vintage to yield the reproduction cost new less depreciation (RCNLD) for that asset (Column J).
5. The reproduction costs of the assets are then summed to produce the RCNLD valuation of the system – in the example, $6,001,770.

IV. RCNLD In Other Jurisdictions

West Virginia has expressly authorized the use of the RCNLD methodology as a stand-alone method for valuing utility assets for voluntary acquisitions. West Virginia's 2020 Senate Bill 551[5] was passed in March of 2020, with an effective date 90 days later, in June of 2020 (attached as **Exhibit B**). To Tennessee-American's knowledge, no applications for utility valuation have been filed pursuant to the West Virginia legislation in the six months since it went into effect. The RCNLD valuation methodology is also *one* of the methodologies authorized in jurisdictions that permit "fair market value" valuations. Attached as **Exhibit C** is an RCNLD valuation (referred to as a "trended original cost study" in the document) that was included in a fair market value appraisal filed in support of a Pennsylvania water system acquisition.[6] Tennessee-American has found that, in fair market value jurisdictions, parties seeking approval of the sale of water and wastewater assets tend to utilize *replacement* cost methodology, or a combination of replacement cost and reproduction cost methodologies, as the cost component of their valuations. *Replacement* cost methodology calculates the current value of the assets based on how the assets would be constructed as of the valuation date, using technology and equipment at that time. *Reproduction* cost methodology calculates the cost to build the assets as they currently exist, including the technology and equipment that are currently in service. The RCNLD methodology proposed by Tennessee-American incorporates *reproduction* cost methodology.

[5] Codified at W. Va. Code Ann. § 24-2-4g(b)(1)-(2) (2020).

[6] *In re: Application and related filings of Pennsylvania-American Water Company under Sections 507, 1102(a), and 1329 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §§ 507, 1102(a), 1329, for approval of its acquisition of water system assets of Steelton Borough Authority,* Docket No. A-2019-3006880 (Pa. Pub. Util. Comm'n), Application Appendix 5.02 (the complete fair market value report is available at https://www.puc.pa.gov/pcdocs/1612801.pdf). Tennessee-American does not have the RCNLD schedules of this document in Excel format.

V. The Commission Should Authorize the Use of RCNLD and Other Methodologies To Determine Rate Base Additions

As discussed in Tennessee-American's July 20, 2020 Comments, and as recognized by the United States Environmental Protection Agency and the Tennessee Department of Environment and Conservation, Tennessee's water and wastewater infrastructure will require investment of more than $10 billion over the next two decades.[7] In many circumstances, the investment required to meet increasing water quality standards can only be achieved through the consolidation of smaller water and wastewater systems.[8] Tennessee-American's suggested revisions to the Commission's proposed rules, in particular the replacement of the net book value standard for determining rate base additions with RCNLD or another valuation methodology more reflective of current value, will support the necessary consolidation of small water and wastewater systems and investment in Tennessee infrastructure by providing appropriate compensation to the owners of selling utilities, while controlling the costs to be passed through to the customers of both the selling and the acquiring utilities.

Conversely, if the Commission creates a presumption that additions to the acquiring utility's rate base are limited to net book value (defined as original cost less depreciation and less unamortized CIAC), it will discourage consolidation and investment. The net book value measure rests on the erroneous assumption that the costs of assets decades ago are representative of the costs of assets today. Net book value also ignores the actual value of unamortized CIAC. For these reasons, selling utilities are very often unwilling or unable to sell their systems at net book value. On the other hand, without reasonable assurance that they will have the opportunity to recover the actual value of the acquired assets in rates, utilities will be unwilling or unable to offer a price that

[7] *See* Tennessee-American Comments at 2 & nn. 1-2.

[8] *See id.* at 3-4 & nn. 3-6.

accurately reflects the value of the selling utility's assets. As discussed above and in Tennessee-American's July 20, 2020 Comments, the Commission should adopt policies that encourage consolidation of Tennessee's smaller water and wastewater systems which, lacking economies of scale, struggle to maintain deteriorating infrastructure and to meet ever-increasing water quality standards. It should also adopt policies that encourage ongoing private investment in those systems. Adoption of net book value as the presumptively correct measure of water and wastewater systems' value for ratemaking purposes would *discourage* such consolidation and investment, thus depriving Tennessee of a critical source of funding to meet the challenges posed by aging infrastructure and increased water quality obligations.

The Company recognizes that the Commission may hesitate to adopt a methodology with which it is unfamiliar. If the Commission is not yet ready to incorporate RCNLD or other methodologies into its rules at this time, it should also refrain from imposing net book value as the presumptive method for determining additions to the acquiring utility's rate base. If rules are to be adopted, they should allow utilities to utilize, and the Commission to consider, more reasonable valuation methods, such as RCNLD or the average embedded cost methodology proposed by Atmos Energy, on a case-by-case basis. There is no need to adopt a valuation rule that would limit the Commission's discretion at this time, particularly when doing so would discourage needed investment in and consolidation of Tennessee's water and wastewater systems.

VI. Conclusion

As noted in Tennessee-American's July 20, 2020 comments, the Commission has taken an important first step to facilitating consolidation of small utility systems through acquisitions. An essential further step is for the Commission to ensure that any rule for the evaluation of utility acquisitions recognizes industry constraints, market realities, Tennessee's ever-increasing need for

significant infrastructure improvements, and customer interests. Respectfully, Tennessee-American does not believe that the published rules, without material changes such as those proposed in its Comments, would serve the public interest. We hope that the informal workshop, together with the comments on file and the hearing held on July 22, 2020, will assist the Commission in ensuring that its rules support the consolidation of smaller water and wastewater systems by supporting compensatory pricing for utility system acquisitions and affording the acquiring utility the opportunity to recover the costs of acquisition, while ensuring that rates paid by customers of both the selling and acquiring utilities are just and reasonable.

Tennessee-American appreciates the opportunity to submit this Response and respectfully requests that the Commission incorporate the revisions attached to the Company's July 20, 2020 substitute comments into its proposed rules or, in the alternative, refrain from adopting rules that will discourage the consolidation of smaller water and wastewater systems by investor-owned utilities.

RESPECTFULLY SUBMITTED,

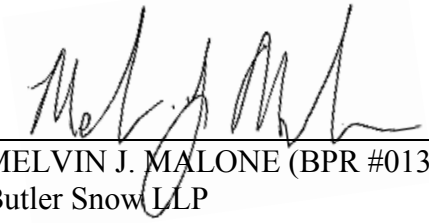

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EXHIBIT A

Tennessee American Water Company

Reproduction Cost New Less Depreciation (RCNLD) Calculation Example

As of 6/30/2020

6/30/2020

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Acct #	Asset Description	Date Acquired	Depreciation Rate	Per Books	Current Depreciation	Accumulated Depreciation 06/30/2020	DOC Value 06/30/2020	RCN Factor	RCNLD Value 06/30/2020
Land & Rights:									
303000	Land & Rights	7/1/1960		$ 600	$ -	$ -	$ 600	1.000	$ 600
303200	Land & Rights	7/1/1960		5,461	-	-	5,461	1.000	5,461
303200	Land & Rights	6/30/1996		28,631	-	-	28,631	1.000	28,631
303200	Land & Rights	1/1/2004		12,336	-	-	12,336	1.000	12,336
303400	Land & Rights	1/1/2004		19,426	-	-	19,426	1.000	19,426
303400	Land & Rights	10/20/2011		59,000	-	-	59,000	1.000	59,000
	Total Land & Rights			$ 125,454	$ -	$ -	$ 125,454		$ 125,454
Structure & Improvements:									
304200	Booster Station	6/30/1989	2.65%	947	25	778	168	2.713	457
304200	Pumping Station	1/1/2004	2.65%	71,340	1,891	31,206	40,134	1.708	68,540
304200	Filter rehab at water treatment plant	4/25/2005	2.65%	57,546	1,525	23,167	34,379	1.605	55,175
304300	WTP Building	6/30/1983	2.65%	1,544,891	40,940	1,515,887	29,004	3.490	101,232
304300	Invensys transmitters for loss of head gauges - plant	2/3/2003	2.65%	3,218	85	1,485	1,733	1.825	3,162
304400	Masonry Block building and main amp breaker box	6/30/1996	2.65%	8,553	227	5,443	3,109	2.240	6,965
304400	Check valve and shut off valve	2/21/2001	2.65%	3,749	99	1,924	1,825	1.902	3,471
304400	Gate valve	7/16/2001	2.65%	2,138	57	1,075	1,063	1.902	2,023
304400	Block walls/Electrical Panel	10/20/2011	2.65%	26,616	705	6,137	20,479	1.231	25,214
	Total Structure & Improvements			$ 1,718,998	$ 45,553	$ 1,587,104	$ 131,894		$ 266,238
Pumping Equipment:									
311000	Pump #1 --Floway Verticle Turbine /Type LKH	7/1/1976	2.65%	589,857	15,631	688,202	-	7.897	-
311000	Pumping Equipment	6/30/1983	2.65%	79,200	2,099	77,713	1,487	5.070	7,539
311000	Pump lagoon	9/1/1993	2.65%	4,550	121	3,237	1,313	3.560	4,674
311000	10HP Electric Motor/ground pump 230-230	6/30/1996	2.65%	11,316	300	7,202	4,114	3.053	12,562
311000	Mud pump @ WTP	5/1/2001	2.65%	2,927	78	1,488	1,440	2.607	3,753
311000	Water pump @ Crossroads booster station	1/4/2003	2.65%	3,728	99	1,729	1,999	2.530	5,059
311000	Raw water pump (spare)	6/2/2003	2.65%	6,164	163	2,792	3,372	2.530	8,533
311000	Pumping Station 3450, 20HP	1/1/2004	2.65%	39,216	1,039	17,154	22,062	2.402	52,995
311000	Pump Station Automation	6/1/2004	2.65%	16,000	424	6,822	9,178	2.402	22,046
311000	175 GPM Pumps and centrifugal controllers	10/20/2011	2.65%	15,000	398	3,459	11,541	1.827	21,087
311000	Pumping Equipment	4/10/2013	2.65%	7,068	187	1,354	5,714	1.644	9,391
	Total Pumping Equipment			$ 775,026	$ 20,538	$ 811,151	$ 62,220		$ 147,638
Water Treatment Equipment:									
320000	Water Treatment Equipment	6/30/1983	2.65%	141,100	3,739	138,451	2,649	3.759	9,956
320000	Water Treatment Equipment	6/30/1999	2.65%	2,400	64	1,337	1,063	2.322	2,469
320000	Water Treatment Equipment	1/29/2001	2.65%	299	8	154	145	2.172	315
320000	Water Treatment Equipment	10/2/2001	2.65%	1,954	52	971	983	2.172	2,134
320000	Water Treatment Equipment	11/16/2001	2.65%	6,618	175	3,268	3,350	2.172	7,276

Tennessee American Water Company

Reproduction Cost New Less Depreciation (RCNLD) Calculation Example

As of 6/30/2020

6/30/2020

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Acct #	Asset Description	Date Acquired	Depreciation Rate	Per Books	Current Depreciation	Accumulated Depreciation 06/30/2020	DOC Value 06/30/2020	RCN Factor	RCNLD Value 06/30/2020
320000	Water Treatment Equipment	12/5/2001	2.65%	1,728	46	851	877	2.172	1,905
320000	Water Treatment Equipment	1/15/2002	2.65%	997	26	488	509	2.104	1,071
320000	Water Treatment Equipment	4/5/2002	2.65%	8	0	4	4	2.104	9
320000	Water Treatment Equipment	6/10/2002	2.65%	2,423	64	1,160	1,263	2.104	2,657
	Total Water Treatment Equipment			$ 157,526	$ 4,174	$ 146,683	$ 10,843		$ 27,791
Distribution Reservoir & Standpipes:									
330000	Distribution Reservoir & Standpipes	6/30/1996	2.65%	44,000	1,166	28,003	15,997	3.331	53,281
330000	Distribution Reservoir & Standpipes	6/30/2000	2.65%	47,826	1,267	25,365	22,461	3.096	69,546
330000	Distribution Reservoir & Standpipes	1/1/2004	2.65%	142,916	3,787	62,516	80,400	2.714	218,230
330000	Distribution Reservoir & Standpipes	3/15/2004	2.65%	5,300	140	2,290	3,010	2.714	8,170
	Total Distribution Reservoir & Standpipes			$ 240,042	$ 6,361	$ 118,174	$ 121,868		$ 349,226

Tennessee American Water Company

Reproduction Cost New Less Depreciation (RCNLD) Calculation Example

As of 6/30/2020

6/30/2020

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Acct #	Asset Description	Date Acquired	Depreciation Rate	Per Books	Current Depreciation	Accumulated Depreciation 06/30/2020	DOC Value 06/30/2020	RCN Factor	RCNLD Value 06/30/2020
Transmission & Distribution Mains:									
331100	Transmission & Distribution Mains	6/1/1958	1.23%	420,084	5,167	320,993	99,091	13.444	1,332,218
331100	Transmission & Distribution Mains	7/1/1960	1.23%	390	5	288	102	12.456	1,271
331100	Transmission & Distribution Mains	5/30/1976	1.23%	1,400	17	760	640	4.010	2,568
331100	Transmission & Distribution Mains	6/30/1976	1.23%	2,548	31	1,380	1,168	4.010	4,684
331100	Transmission & Distribution Mains	6/30/1977	1.23%	713	9	377	336	3.861	1,296
331100	Transmission & Distribution Mains	6/30/1980	1.23%	207	3	102	105	3.159	332
331100	Transmission & Distribution Mains	6/30/1983	1.23%	236	3	108	129	2.762	355
331100	Transmission & Distribution Mains	6/30/1996	1.23%	21,777	268	6,433	15,344	1.976	30,324
331100	Transmission & Distribution Mains	4/5/2002	1.23%	3,496	43	785	2,711	1.648	4,469
331100	Transmission & Distribution Mains	6/14/2010	1.23%	110,364	1,357	13,645	96,719	1.152	111,410
331210	Transmission & Distribution Mains	12/1/1975	1.23%	612	8	336	276	4.170	1,152
331210	Transmission & Distribution Mains	6/30/1978	1.23%	4,070	50	2,104	1,966	3.690	7,255
331210	Transmission & Distribution Mains	6/30/1979	1.23%	480	6	242	238	3.418	813
331210	Transmission & Distribution Mains	6/30/1982	1.23%	1,099	14	514	585	3.044	1,781
331210	Transmission & Distribution Mains	6/30/1984	1.23%	4,108	51	1,820	2,288	2.799	6,403
331210	Transmission & Distribution Mains	6/30/1988	1.23%	9,216	113	3,630	5,586	3.262	18,224
331210	Transmission & Distribution Mains	3/31/1994	1.23%	23,011	283	7,435	15,576	2.183	34,006
331210	Transmission & Distribution Mains	6/30/1996	1.23%	369,784	4,548	109,235	260,549	1.976	514,923
331210	Transmission & Distribution Mains	7/10/1996	1.23%	2,750	34	811	1,939	1.976	3,831
331210	Transmission & Distribution Mains	5/2/1997	1.23%	43,570	536	12,421	31,149	1.931	60,136
331210	Transmission & Distribution Mains	12/9/1997	1.23%	1,478	18	410	1,068	1.931	2,061
331210	Transmission & Distribution Mains	9/30/1999	1.23%	463,890	5,706	118,478	345,412	1.904	657,698
331210	Transmission & Distribution Mains	3/9/2000	1.23%	29,656	365	7,413	22,243	1.805	40,152
331210	Transmission & Distribution Mains	4/5/2002	1.23%	553,148	6,804	124,163	428,985	1.648	707,053
331210	Transmission & Distribution Mains	7/1/2005	1.23%	32,320	398	5,966	26,354	1.443	38,026
331210	Transmission & Distribution Mains	6/14/2010	1.23%	391,290	4,813	48,379	342,911	1.418	486,111
331210	Transmission & Distribution Mains	7/1/2012	1.23%	403,715	4,966	39,739	363,976	1.292	470,293
331350	Transmission & Distribution Mains	9/30/1999	1.23%	14,747	181	3,766	10,980	1.904	20,907
331350	Transmission & Distribution Mains	4/5/2002	1.23%	3,164	39	710	2,454	1.648	4,044
	Total Transmission & Distribution Mains			$ 2,913,324	$ 35,834	$ 832,447	$ 2,080,877		$ 4,563,795
Services:									
334000	Services	3/31/1994	1.68%	318	5	140	178	2.353	418
333000	Services	6/30/1996	1.68%	4,388	74	1,770	2,618	2.199	5,757
333000	Services	5/2/1997	1.68%	6,482	109	2,524	3,958	2.186	8,651
333000	Services	12/9/1997	1.68%	432	7	164	268	2.186	586
333000	Services	9/30/1999	1.68%	39,009	655	13,608	25,401	2.114	53,693
333000	Services	3/9/2000	1.68%	35,083	589	11,978	23,104	2.029	46,872
333000	Services	4/5/2002	1.68%	9,756	164	2,991	6,765	1.961	13,267
333000	Services	1/1/2004	1.68%	31,048	522	8,610	22,438	1.820	40,828

Tennessee American Water Company

Reproduction Cost New Less Depreciation (RCNLD) Calculation Example

As of 6/30/2020

6/30/2020

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Acct #	Asset Description	Date Acquired	Depreciation Rate	Per Books	Current Depreciation	Accumulated Depreciation 06/30/2020	DOC Value 06/30/2020	RCN Factor	RCNLD Value 06/30/2020
333000	Services	7/1/2005	1.68%	5,800	97	1,462	4,338	1.722	7,469
333000	Services	7/1/2012	1.68%	65,765	1,105	8,842	56,923	1.181	67,203
	Total Services			$ 198,081	$ 3,328	$ 52,090	$ 145,990		$ 244,745
Meters & Meter Installations:									
334000	Meters & Meter Installations	6/30/1983	7.00%	2,276	159	5,899	-	3.255	-
334000	Meters & Meter Installations	1/1/2004	7.00%	629	44	727	-	2.217	-
334000	Meters & Meter Installations	6/30/2012	7.00%	38,247	2,677	21,433	16,814	1.211	20,363
334000	Meters & Meter Installations	6/30/2013	7.00%	29,194	2,044	14,316	14,878	1.205	17,923
	Total Meters & Meter Installations			$ 70,346	$ 4,924	$ 42,375	$ 31,692		$ 38,286
Hydrants:									
335000	Hydrants	12/1/1975	1.83%	400	7	327	73	7.699	566
335000	Hydrants	12/31/1982	1.83%	1,662	30	1,141	521	4.494	2,340
335000	Hydrants	6/30/1984	1.83%	956	17	630	326	4.078	1,328
335000	Hydrants	3/31/1994	1.83%	2,057	38	989	1,068	2.816	3,008
335000	Hydrants	6/30/1996	1.83%	33,425	612	14,690	18,735	2.634	49,347
335000	Hydrants	5/2/1997	1.83%	2,948	54	1,250	1,697	2.318	3,935
335000	Hydrants	12/9/1997	1.83%	1,490	27	615	875	2.318	2,027
335000	Hydrants	9/30/1999	1.83%	25,897	474	9,841	16,056	2.167	34,799
335000	Hydrants	3/9/2000	1.83%	710	13	264	446	2.093	933
335000	Hydrants	4/5/2002	1.83%	24,280	444	8,109	16,171	1.949	31,513
335000	Hydrants	1/1/2004	1.83%	36,006	659	10,877	25,129	1.882	47,296
335000	Hydrants	7/1/2005	1.83%	2,092	38	575	1,517	1.832	2,780
335000	Hydrants	7/1/2012	1.83%	47,616	871	6,973	40,643	1.445	58,725
	Total Hydrants			$ 179,538	$ 3,286	$ 56,280	$ 123,258		$ 238,596
				6,378,335	123,999	3,646,305	2,834,096		6,001,770

Overall RCNLD Factor 2.12

NOTE: RCNLD Factors were selected from the Handy-Whitman Index of Public Utility Costs by property type and region

EXHIBIT B

West's Annotated Code of West Virginia
Chapter 24. Public Service Commission
Article 2. Powers and Duties of Public Service Commission (Refs & Annos)

W. Va. Code, § 24-2-4g

§ 24-2-4g. Establishing the value of utility assets in the context of the acquisition of a utility or utility assets and providing for the combination or allocation of water and wastewater revenue requirements

Effective: June 5, 2020
Currentness

(a) The Legislature finds that:

(1) Many West Virginia publicly owned municipal, public service district-owned, and investor-owned water and wastewater utilities face substantial capital investment needs to replace aging utility infrastructure and to maintain compliance with regulatory requirements, and many municipalities that own and operate utility systems are confronted with additional financial challenges arising from diminishing tax bases, the need to repair streets and other municipally owned facilities, and unfunded or underfunded liabilities for pension and other post-employment benefit programs;

(2) Given these challenges, some of these utilities may be unable to continue to provide acceptable levels of utility service at reasonable rates, and may wish to consider the sale of their utility assets, and this decision will require those utilities to consider the expected valuation of their utility assets, the manner in which the post-acquisition rates of their customers will be established and moderated, and the purposes to which the proceeds of any sale of utility assets by a municipality may be devoted under state law;

(3) For utilities considering the sale of their utility assets, a valuation of the utility assets that is primarily based on the original cost of those assets less depreciation and less the value of contributed property will: (A) Understate the actual fair value of those assets to an acquiring party; (B) fail to account for potential income that could be generated from those assets; (C) reduce the financial benefit to utilities considering selling those assets; and (D) thereby disincentivize those utilities from selling those assets;

(4) To assist utilities considering the sale of their utility assets in making informed decisions on whether to sell their utility assets, the commission will permit acquiring and selling parties to negotiate a value for those assets, permit the acquiring party to include the negotiated sale price of the assets in post-acquisition rate base for rate-making purposes, and make its post-acquisition rate-base determination based on the valuation approach specified in this section;

(5) To assist utilities that provide both water and wastewater utility service in moderating the rate impact of wastewater service investment on wastewater system customers, it is appropriate to authorize the combination of water and wastewater revenue requirements or the allocation of a portion of a wastewater revenue requirement to water customers if such a combination or allocation is just and reasonable and results in water and wastewater rates that are based primarily on the cost of providing service;

(6) Expanding the permissible uses by a municipality of the proceeds of a sale of utility assets as provided for in § 8-12-17 of this code will also facilitate and encourage a municipality's ability to sell its utility assets, should it choose to do so; and

(7) The enactment of these regulatory improvements will facilitate the repair and replacement of utility infrastructure by improving access to investment capital and moderating the rate impact to customers of investments in utility infrastructure, and thereby enhancing the state of water and wastewater utility infrastructure assets and the service provided by those assets, all of which are in the best interest of West Virginia and its citizens.

(b) *Value of utility assets; rate-base addition; ancillary approvals*. --

(1) In any case filed pursuant to § 24-2-12 of this code seeking the commission's prior consent and approval of the acquisition by an acquiring utility of the utility assets of a selling utility, the applicants may propose a negotiated sale price for the utility assets that is in accordance with utility asset valuation methodologies, such as depreciated original cost, or reproduction cost new less depreciation, or other industry standard utility asset valuation methods, excluding the use of fair market appraisal valuation methods: *Provided,* That the applicants will present evidence of those asset values in the application: *Provided*, *however*, That the utility asset valuation methodologies and definitions referenced in § 24-2-4g(d) of this code apply solely to cases filed pursuant to chapter 24 of this code.

(2) If the commission finds that the proposed acquisition, including the negotiated sale price, satisfies the requirements for approval in § 24-2-12 of this code, including a finding that the terms and conditions of the acquisition are reasonable and that neither party thereto is given an undue advantage over the other, and does not adversely affect the public in this state, then the commission will establish the rate based addition at the negotiated sale price, as determined and in accordance with subdivision (1) of this subsection.

(3) In its order granting, denying, or modifying the relief requested in an application described in subdivision (1) of this subsection, the commission may also approve any rate stabilization plan, tariff change or provision, or surcharge mechanism proposed by the applicants and that the commission finds reasonable in view of the proposed transaction and the acquiring utility's proposed post-acquisition improvements to the utility assets.

(4) In any application described in subdivision (1) of this subsection, the commission will issue a final order granting, denying, or granting in part and denying in part the relief requested in the application.

(5) Nothing in this section or § 24-2-12 of this code requires an acquiring utility or a selling utility to obtain the prior consent and approval of the commission to enter into agreements or undertake commitments incident to the negotiation, due diligence, or finalization of an agreement to purchase and sell utility assets, including, without limitation, agreements and commitments relating to:

(A) The exclusivity of negotiations for a defined period;

(B) The confidentiality of negotiations and nondisclosure of facts relevant to the negotiations;

(C) The payment of transaction costs as between the parties, the reimbursement of those costs upon closing of an acquisition of utility assets, or the allocation of costs in the event the acquisition is not consummated;

(D) The acquiring utility's completion of post-acquisition additions or improvements to the utility assets or its commitments as to post-acquisition rates and charges for utility service; or

(E) Any other commercial term reasonably necessary to facilitate the negotiation, due diligence, or finalization of the purchase and sale agreement.

(c) *Request for revenue requirement combination or allocation*. --

(1) A single utility that provides both water and wastewater utility services may request a combination of the revenue requirements of the water and wastewater utility services or an allocation of a portion of the wastewater revenue requirement to water customers. Such a request may be made as a separate filing with the commission or as part of a base rate case, a tariff filing, a statutory consent case under § 24-2-12 of this code, or another proceeding before the commission.

(2) If the commission finds that a combination or allocation requested under subdivision (1) of this subsection: (A) Will enable the acquisition and construction of wastewater infrastructure improvements or compliance with regulatory requirements at a more moderate rate impact for wastewater customers; and (B) will result in a combined water and wastewater rate, or separate water and wastewater rates that are just, reasonable, and based primarily on the cost of providing service, then the commission may authorize the utility to implement the combination or allocation, subject to such modifications as the commission may determine to be appropriate.

(d) *Definitions*. -- The following words and phrases when used in this section will have the meanings given to them in this section unless the context clearly indicates otherwise:

(1) “Acquiring utility” means: (A) A water, sewer, or stormwater utility subject to the provisions of this chapter that has entered into an agreement with a selling utility to acquire utility assets of the selling utility; or (B) any person or business entity that has entered into such an agreement and that, upon commission approval of the acquisition of those utility assets, will become a water, sewer, or stormwater utility subject to the provisions of this chapter.

(2) “Depreciated original cost” means the original cost of utility assets net of accumulated depreciation.

(3) “Negotiated sale price” means the purchase price of utility assets that the acquiring utility and the selling utility agree upon through voluntary, arm's-length negotiations.

(4) “Original sources of funding” means all methods used to fund the utility assets, including, but not limited to, loan funding, grant funding, and property otherwise contributed to the utility.

(5) “Rate-base addition” means the dollar amount of utility rate base associated with the utility assets that the acquiring utility may include in the calculation of its post-acquisition rate base for rate-making purposes.

(6) “Reproduction cost new less depreciation” means an estimate of the cost to construct, at current prices, an exact duplicate or replica of the utility assets, without regard to the original sources of funding for those assets, using the same materials, construction standards, design, layout, and quality without adjustment for deficiencies, super-adequacies, and obsolescence of those assets, net of depreciation.

(7) “Selling utility” means a water, sewer, or stormwater utility subject to the provisions of this chapter that has entered into an agreement to sell utility assets to an acquiring utility.

(8) “Utility assets” or “assets” mean all or substantially all of the tangible and intangible assets of a selling utility that: (A) The selling utility has used in the provision of utility service or held for the future provision of such service; and (B) the acquiring utility will reasonably require to provide utility service after the acquisition to facilitate its plans for the provision of utility service after the acquisition.

(9) “Utility asset valuation” means industry standard valuation methods of determining the value of utility assets, regardless of original sources of funding.

(e) This section, together with the amendments to § 8-12-17 of this code, made during the 2020 regular session of the West Virginia Legislature, shall be known and referred to as the Water and Wastewater Investment Facilitation Act.

Credits
Acts 2020, S.B. 551, eff. June 5, 2020.

W. Va. Code, § 24-2-4g, WV ST § 24-2-4g
Current with legislation of the 2020 Regular Session.

End of Document

EXHIBIT C

Valuation Report

Steelton Borough Authority

June 12, 2018

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MANAGEMENT CONSULTANTS

INTRODUCTION AND PURPOSE

Dylan W. D'Ascendis, CVA, CRRA, Director at ScottMadden, Inc. (hereinafter "ScottMadden") (Full professional qualifications included in Appendix C to this report) has been retained by Steelton Borough Authority (hereinafter, the "Client") to value the water operations of Steelton Borough Authority (hereinafter the "Authority" or the "Subject Interest") in accordance with Public Utility Code ("66 PA.C.S.") – Valuation of Acquired Water and Wastewater Systems for Ratemaking Purposes as of June 12, 2018. The conclusion of value derived as a result of this engagement is valid only for the stated purpose as of the date of valuation. The valuation report does not reflect a value of the Subject Interest under any other circumstances other than those described in this report; therefore, no other purpose is intended or should be inferred.

For consideration in this transaction is a 100% interest in the Authority, which means that the purchaser of the Subject Interest would be able to control the entity's operations going forward. The Subject Interest is not a marketable interest since it is not publicly traded, and it would be difficult to immediately turn the Subject Interest into cash.

ScottMadden has used fair market value as the standard of value for this engagement. The Internal Revenue Service's Revenue Ruling 59-60 recommends the use of fair market value for valuation of corporate stocks on which market quotations are either unavailable or of such scarcity that they do not reflect the fair market value. Fair market value is defined in Section 25.2512-1 of the U.S. Treasury Regulations (Gift Tax Regulations) as:

> The price at which property would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts.

The premise of value is an assumption regarding the most likely set of transactional circumstances that may be applicable to the subject valuation. In lay terms, this explains what is going to happen to the Subject Interest after the transaction. There are any number of variations of premise of value, but two general premises of value are Liquidation (the Subject Interest does not continue operating after the transaction) and Going Concern (the Subject Interest continues operating after the transaction). The premise of value applied in this valuation study is Going Concern as there is no indication that the Subject Interest would cease operations after the transaction.

COMPANY BACKGROUND AND OPERATIONS

The Subject Interest is the water operations of the Steelton Borough Authority.

The Authority was created by an ordinance of the Steelton Borough Council, incorporated under the Municipality Authorities Act of 1945, being the Act of May 2, 1945, P.L. 382, as amended by the Commonwealth of Pennsylvania. The purpose of the Authority includes those activities of acquiring, holding, constructing, improving, owning and leasing water, water systems or parts thereof. The Authority is overseen by the Board which consists of five members who are appointed by Borough Council. The Authority employed the Borough to manage and operate the water system through a management agreement, in which the Authority owns, and is responsible for, the management of and charges for water services.

The Authority serves approximately 6,300 customers through 2,421 metered service connections in Steelton and Swatara Township. The existing water system consists of the water treatment plant and the storage and distribution system. The water treatment plant obtains all of its water from an intake in the Susquehanna River and typically treats between 1.6 and 2.4 million gallons of raw water per day ("MGD"), with a capacity of 3.0 MGD. The water distribution system consists of approximately 28 miles of pipe, which ranges from 4 to 20 inches in diameter. The Authority has two interconnections with SUEZ Water Pennsylvania Inc., one on S. 19th Street and another near the finished water storage tanks.

SUMMARY OF VALUATION APPROACHES

The valuation of the Subject Interest as a Going Concern considers several methods. Each method, at times, may appear more theoretically justified in its use than others. The soundness of a particular method is based on the specific circumstances of each case. We are responsible for selecting the most appropriate approach/method of valuation for this case. The commonly used methods of valuation can be grouped into one of three general approaches: The Cost Approach, the Market Approach, and the Income Approach.

Cost Approach

The Cost Approach is a valuation method that typically values the underlying assets of a company to derive their market value. Because this method only focuses on the company's underlying assets, it fails to reflect the past and projected profitability of the company, as well as the associated risks inherent in the company's operations. Typically, the analyst would start with the current replacement (or reproduction) cost new of the assets being valued and then deduct for the loss in value caused by physical deterioration, functional obsolescence, and economic obsolescence of those assets to arrive at an indicated market value.

Market Approach

The Market Approach considers comparable transactions of similar utilities in the same general timeframe and general operational area as the company and other market-based data to establish a fair market value. Usually, finding comparable transactions is difficult, if not impossible, since no two companies are identical, nor are they usually timely. In addition, details surrounding utility transactions, particularly private transactions, are incomplete at best. In spite of these challenges, an analyst may be able to pinpoint a relevant multiple of purchase price or transaction value and then apply that multiple to the Subject Interest to derive a value for that Interest. One can also look to the market data of publicly-traded companies comparable in risk to the Subject Interest for an indication of value.

Income Approach

The Income approach provides an indication of value by discounting the expected or future cash flows of a company to a present value. The projected cash flows must account for additional investment and working capital additions and reflect the specific growth potential of the system being valued. The discount rate used to calculate the present value of the company must be derived from market data of similar risk companies. The discount rate must also take into account how the potential acquirer will finance the transaction (e.g. debt, equity, or a combination of debt and equity).

APPLICATION OF THE COST APPROACH

Description of Facilities

Steelton Borough Authority

The description of the Authority's assets is described fully in HRG's "Water System Assessment of Tangible Assets" (attached as Appendix D to this Report), and summarized below:

As mentioned above, the Authority water system is comprised of a water treatment plant and storage and distribution system.

Water Treatment Plant

Originally constructed in 1973, the capacity of the water treatment plant is 3.0 MGD, but it typically treats between 1.6 and 2.4 MGD. All the raw water comes to the water treatment plant from an intake at the Susquehanna River. The treatment process consists of potassium permanganate for disinfection by-products, alum for coagulation, flash mixing, two up-flow sludge blanket clarifiers for flocculation and sedimentation, four multimedia filters and chlorine disinfection. The existing filtration system was also originally installed in 1973 and has been consistently upgraded over the life of the system, most recently in 2017 (new clearwell, for disinfection by-product removal).

Two vertical turbine raw water pumps convey the water from the raw water pumping station to the up-flow clarifier and rapid mix tank. From there, the water flows by gravity through the treatment process into the clearwell. Two centrifugal finished water pumps convey the water from the clearwell to the distribution system. The treatment process continues until the finished water tanks are filled to their maximum operating levels.

Water Distribution System

The Authority's distribution system consists of a network of water distribution piping including approximately 28 miles of pipe ranging from 4 to 20 inches in diameter, one water booster station, two 2-million-gallon finished water storage tanks, and two interconnections with SUEZ Water Pennsylvania Inc., one on S. 19th Street and one near the finished water tanks. The water mains are either comprised of cast iron (75,659 ft) or ductile iron (69,829 ft) pipe.

Condition of Facilities

ScottMadden performed a review and analysis of the fixed capital assets as listed by the Client, and an extensive on-site visit of the above ground facilities on March 27, 2018. Based on that review, it was determined that the Steelton system is in good condition commensurate with its age.

Trended Original Cost Study

The first step in arriving at the fair market value of the assets of the Subject Interest using the Cost Approach derives the "reproduction cost new" for the assets that comprise the Authority. In order to arrive at the reproduction cost new for the Authority's assets, ScottMadden began with the original cost of the assets provided by the Client, and used the Handy-Whitman Index to determine the current reproduction value. The Handy-Whitman Index is prepared specifically for electric, gas, and water utilities, and is the only publication of its kind available to the public. The Index has been published continuously since 1924. The Index is comprised of historical index values for various accounts prescribed by the National Association of Regulatory Utility Commissioners (hereinafter "NARUC") Uniform System of Accounts, as well as for construction, material, and labor, by geographic region of the United States.

The trended original cost method consists of the development of adjustment factors from the time when the asset was put into service to the current date. For example, an average distribution main (NARUC account 331) placed into service in 1985 with an original cost of $100,000 would be trended forward by the ratio of the index value at the current date divided by the index value at the time of installation. The index value of NARUC account 331 in January 2018 is 790.00, and the index value at 1985 when the assets were installed was 254.00, which means the ratio

applied to the original cost of the distribution main would be 3.11.[1] This would translate into a current cost for the steel main of $311,024.[2]

The next step in deriving the fair market value of the Subject Interest using the Cost Approach is to quantify the amount of physical deterioration, functional obsolescence, and economic obsolescence of the assets. Physical deterioration is caused by use, wear and tear, and the aging process. Functional obsolescence is caused by changes in design or construction to create efficiencies not present in the current asset. Economic obsolescence is a loss in value due to external factors not in the control of the Company such as economic conditions. The most common measure of physical deterioration is the reserve held for depreciation, which is based on the asset's remaining life versus its average useful life. Functional obsolescence is measured by comparing the subject asset to a replacement asset with current technology. We have found no significant functional obsolescence for Authority assets. Economic obsolescence is usually measured by market conditions, which have been supportive towards water in the recent past, as well as prospectively, so ScottMadden does not believe there is significant economic obsolescence present in Authority assets. Since the only applicable measure of loss of value is physical deterioration, the useful lives for each asset were determined and reserves for depreciation were calculated for each Authority asset if original costs were available.

Indication of Value Using the Cost Approach

Using the Handy-Whitman Index to trend the original cost, less depreciation of the Authority's assets forward, to replacement cost new, less depreciation, ScottMadden arrived at the reproduction cost new minus depreciation value of $22,243,034.

As stated above, the value derived from the Cost Approach is based solely on the underlying assets of the Subject Interest, which means it does not take into account the expected cash flows of these assets. Additionally, even though the Handy-Whitman Index takes into account the changes in the cost of various factors over time in different regions throughout the country, it cannot take into account intricacies such as terrain (e.g. mountains in Appalachia versus farmland in Pennsylvania) or changes in development and zoning since original installation. All else remaining equal, different terrains or changes in laws will translate into different timeframes to complete the project, which will directly affect costs.

Also mentioned previously, Some of the Authority's assets were combined under one NARUC account number (predominantly the original water treatment plant, and subsequent upgrades in 2010 and 2017), and therefore, ScottMadden had to make its best guess as to what NARUC account was the most appropriate. In addition, some assets did not have original costs assigned, so ScottMadden relied upon the estimation of original cost provided by

[1] 790.00 / 254.00 = 3.11.
[2] (790.00 / 254.00) x $100,000 = $311,023.

HRG, the commonly used engineering firm, for this analysis. With this in mind, it is ScottMadden's opinion that the value of Authority assets derived by the Cost Approach may be less accurate than if ScottMadden was provided an asset list with itemized original costs by NARUC account numbers for large projects and actual original costs.

APPLICATION OF THE MARKET APPROACH

Market-to-Book Multiple Method

The Market Approach is a valuation technique whereby the value of a company is estimated based on pricing relationships associated with market transactions involving similar companies. A common technique to derive a value using market data would be to apply a market-to-book ratio of a comparable risk group to the book value of the Authority's assets. As shown on page 2 of Schedule 2, market-to-book ratios of the water utility proxy group used to derive the weighted average cost of capital (hereinafter "WACC") in the income approach range from 2.46x to 3.93x book value. Using the original cost less depreciation of Authority assets of $14,100,852,[3] indicated values range from $34,702,197 to $55,416,349, with a midpoint of $45,059,273 as shown on page 3 of Schedule 2.

Comparable Sales Method

ScottMadden also researched transactions involving companies who acquired 100% of a water or sewer interest since 2015. That research returned thirty-one results from around the country, eleven of which were acquisitions in Pennsylvania, which are contained on page 4 of Schedule 2.[4] A common ratio which can be used to determine Steelton's market value is transaction value per customer connection. The purchase price per customer connection ratios for the relevant transactions are also shown on page 4 of Schedule 2. As shown on page 4 of Schedule 2, the nationwide average purchase price to customer connection is 4.37x, while the Pennsylvania average purchase price to customer connection is 6.97x. Given the Authority's 2,421 water connections, indicated values using this approach range from $10,569,043 to $16,865,828, with a midpoint of $13,717,435 for the Authority.

Indication of Value using the Market Approach

Averaging the midpoints of the market-to-book method and the comparable sales method indicates a value of $29,388,354 for the Authority assets as shown on page 1 of Schedule 2.

APPLICATION OF THE INCOME APPROACH

ScottMadden performed an independent study of the value of the income generated from service to its customers. The Income Approach employed by ScottMadden is based on the "highest and best use" assumption that the assets of Steelton would be "maximally productive" or profitable if owned by similar entities.

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3 From Schedule 1, page 2.

4 Transaction details are provided in Appendix E.

Steelton Borough Authority
Calculation of Trended Original Cost Less Depreciation
of Operating Assets

NARUC Code	Asset	Original Year Installed / Purchase Date	Age	Estimated / Actual Original Cost	Useful Life	Accumulated Depreciation	Net Book Value	HW Index Value Orig	HW Index Value Present	HW Ratio	Trended Original Cost Less Depreciation	Notes
303	Land and Land Rights	1971	N/A	$ 1	NA	$ -	$ 1				$ 1	
303	Land and Land Rights	1972	N/A	$ 1	NA	$ -	$ 1				$ 1	
303	Land and Land Rights	1972	N/A	$ 5,150	NA	$ -	$ 5,150				$ 5,150	
303	Land and Land Rights	1972	N/A	$ 5,253	NA	$ -	$ 5,253				$ 5,253	
303	Land and Land Rights	1972	N/A	$ 6,695	NA	$ -	$ 6,695				$ 6,695	
303	Land and Land Rights	1972	N/A	$ 6,901	NA	$ -	$ 6,901				$ 6,901	
303	Land and Land Rights	1972	N/A	$ 8,240	NA	$ -	$ 8,240				$ 8,240	
303	Land and Land Rights	1985	N/A	$ 1	NA	$ -	$ 1				$ 1	
303	Right-of-way	2001	N/A	$ 1	NA	$ -	$ 1				$ 1	
303	Easement	2010	N/A	$ 1	NA	$ -	$ 1				$ 1	
303	Land and Land Rights	N/A	N/A	N/A	NA	$ -	NA				NA	
303	Land and Land Rights	N/A	N/A	N/A	NA	$ -	NA				NA	
304	Structure	2010	8	$ 2,321,734	40	$ 464,347	$ 1,857,387	558	687	1.23	$ 2,286,783	W1 - Structures and Improvements
304	Building	2014	4	$ 9,584	15	$ 2,556	$ 7,028	630	687	1.09	$ 7,664	W1 - Structures and Improvements
310	Power Generation Equipment	2015	3	$ 272,951	25	$ 32,754	$ 240,197	551	507	0.92	$ 221,016	M - Turbo Generators
310	Power Generation Equipment	2015	3	$ 272,951	25	$ 32,754	$ 240,197	551	507	0.92	$ 221,016	M - Turbo Generators
311	Pumps	2012	6	$ 6,881	20	$ 2,064	$ 4,817	785	1,146	1.46	$ 7,032	W1 - Electric Pumping Equipment
311	Pumps	2014	4	$ 6,622	20	$ 1,324	$ 5,298	900	1,146	1.27	$ 6,746	W1 - Electric Pumping Equipment
311	Pumps	2018	0	$ 3,662	20	$ -	$ 3,662	1,146	1,146	1.00	$ 3,662	W1 - Electric Pumping Equipment
320	Potassium Permanganate System	2004	14	$ 7,500	40	$ 2,625	$ 4,875	462	797	1.73	$ 8,410	W1 - Large treatment plant equipment
320	Potassium Permanganate System	2004	14	$ 7,500	40	$ 2,625	$ 4,875	462	797	1.73	$ 8,410	W1 - Large treatment plant equipment
320	Non-Ionic Polymer System	2015	3	$ 12,264	40	$ 920	$ 11,344	737	797	1.08	$ 12,268	W1 - Large treatment plant equipment
320	Liquid Alum System	2016	2	$ 3,264	40	$ 163	$ 3,101	758	797	1.05	$ 3,260	W1 - Large treatment plant equipment
320	Soda Ash System	2016	2	$ 12,987	40	$ 649	$ 12,338	758	797	1.05	$ 12,972	W1 - Large treatment plant equipment
320	Non-Ionic Polymer System	2017	1	$ 3,291	40	$ 82	$ 3,209	785	797	1.02	$ 3,258	W1 - Large treatment plant equipment
320	Mixer	2018	0	$ 893	40	$ -	$ 893	797	797	1.00	$ 893	W1 - Large treatment plant equipment
331	4" Gate Valve	1907	111	$ 54	10	$ 54	$ -					W1 - Mains - Average all Types
331	10" Gate Valve	1907	111	$ 150	10	$ 150	$ -					W1 - Mains - Average all Types
331	8" Gate Valve	1907	111	$ 208	10	$ 208	$ -					W1 - Mains - Average all Types
331	6" Gate Valve	1907	111	$ 235	10	$ 235	$ -					W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1907	111	$ 414	65	$ 414	$ -					W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	1907	111	$ 2,263	65	$ 2,263	$ -					W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1907	111	$ 2,442	65	$ 2,442	$ -					W1 - Mains - Average all Types
331	10" Ductile Iron Pipe	1907	111	$ 3,810	65	$ 3,810	$ -					W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1907	111	$ 1,221	40	$ 1,221	$ -					w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1907	111	$ 4,253	65	$ 4,253	$ -					M - Construction Equipment
354	Surface Restoration	1907	111	$ 5,954	15	$ 5,954	$ -					M - Construction Equipment
331	8" Gate Valve	1916	102	$ 35	10	$ 35	$ -					W1 - Mains - Average all Types
331	4" Gate Valve	1916	102	$ 49	10	$ 49	$ -					W1 - Mains - Average all Types
331	6" Gate Valve	1916	102	$ 132	10	$ 132	$ -					W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1916	102	$ 210	65	$ 210	$ -					W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	1916	102	$ 666	65	$ 666	$ -					W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1916	102	$ 673	65	$ 673	$ -					W1 - Mains - Average all Types
331	12" Gate Valve	1916	102	$ 1,237	10	$ 1,237	$ -					W1 - Mains - Average all Types
331	12" Ductile Iron Pipe	1916	102	$ 7,758	65	$ 7,758	$ -					W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1916	102	$ 1,825	40	$ 1,825	$ -					w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1916	102	$ 3,362	65	$ 3,362	$ -					M - Construction Equipment
354	Surface Restoration	1916	102	$ 4,708	15	$ 4,708	$ -					M - Construction Equipment
331	10" Gate Valve	1926	92	$ 242	10	$ 242	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	8" Gate Valve	1926	92	$ 500	10	$ 500	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	4" Gate Valve	1926	92	$ 604	10	$ 604	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	10" Ductile Iron Pipe	1926	92	$ 764	65	$ 764	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	6" Gate Valve	1926	92	$ 891	10	$ 891	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	12" Gate Valve	1926	92	$ 1,116	10	$ 1,116	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	1926	92	$ 2,691	65	$ 2,691	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1926	92	$ 5,182	65	$ 5,182	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1926	92	$ 6,303	65	$ 6,303	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
331	12" Ductile Iron Pipe	1926	92	$ 7,093	65	$ 7,093	$ -	21	790	37.62	$ -	W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1926	92	$ 3,661	40	$ 3,661	$ -					w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1926	92	$ 11,825	65	$ 11,825	$ -	21	580	27.62	$ -	M - Construction Equipment
354	Surface Restoration	1926	92	$ 16,555	15	$ 16,555	$ -					M - Construction Equipment
331	4" Gate Valve	1946	72	$ 124	10	$ 124	$ -	29	790	27.24	$ -	W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1946	72	$ 1,868	65	$ 1,868	$ -	29	790	27.24	$ -	W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1946	72	$ 260	40	$ 260	$ -					w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1946	72	$ 1,402	65	$ 1,402	$ -	34	580	17.06	$ -	M - Construction Equipment

Steelton Borough Authority
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NARUC Code	Asset	Original Year Installed / Purchase Date	Age	Estimated / Actual Original Cost	Useful Life	Accumulated Depreciation	Net Book Value	HW Index Value Orig	HW Index Value Present	HW Ratio	Trended Original Cost Less Depreciation	Notes
354	Surface Restoration	1946	72	$ 1,962	15	$ 1,962	$ -					M - Construction Equipment
331	10" Ductile Iron Pipe	1956	62	$ 3,737	65	$ 3,565	$ 172	57	790	13.86	$ 2,391	W1 - Mains - Average all Types
354	Excavation And Aggregate Backfill	1956	62	$ 1,245	65	$ 1,188	$ 57	55	580	10.55	$ 606	M - Construction Equipment
354	Surface Restoration	1956	62	$ 1,744	15	$ 1,744	$ -					M - Construction Equipment
331	4" Gate Valve	1966	52	$ 237	10	$ 237	$ -	75	790	10.53	$ -	W1 - Mains - Average all Types
331	6" Gate Valve	1966	52	$ 325	10	$ 325	$ -	75	790	10.53	$ -	W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1966	52	$ 1,100	65	$ 880	$ 220	75	790	10.53	$ 2,318	W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1966	52	$ 1,197	65	$ 958	$ 239	75	790	10.53	$ 2,522	W1 - Mains - Average all Types
354	Excavation And Aggregate Backfill	1966	52	$ 1,623	65	$ 1,298	$ 325	73	580	7.95	$ 2,579	M - Construction Equipment
354	Surface Restoration	1966	52	$ 2,272	15	$ 2,272	$ -					M - Construction Equipment
331	4" Gate Valve	1976	42	$ 3,378	10	$ 3,378	$ -	154	790	5.13	$ -	W1 - Mains - Average all Types
331	12" Gate Valve	1976	42	$ 4,057	10	$ 4,057	$ -	154	790	5.13	$ -	W1 - Mains - Average all Types
331	16" Gate Valve	1976	42	$ 4,161	10	$ 4,161	$ -	154	790	5.13	$ -	W1 - Mains - Average all Types
331	10" Gate Valve	1976	42	$ 9,790	10	$ 9,790	$ -	154	790	5.13	$ -	W1 - Mains - Average all Types
331	16" Ductile Iron Pipe	1976	42	$ 13,004	65	$ 8,403	$ 4,601	154	790	5.13	$ 23,605	W1 - Mains - Average all Types
331	6" Gate Valve	1976	42	$ 15,805	10	$ 15,805	$ -	154	790	5.13	$ -	W1 - Mains - Average all Types
331	8" Gate Valve	1976	42	$ 21,808	10	$ 21,808	$ -	154	790	5.13	$ -	W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1976	42	$ 22,214	65	$ 14,354	$ 7,860	154	790	5.13	$ 40,323	W1 - Mains - Average all Types
331	12" Ductile Iron Pipe	1976	42	$ 79,336	65	$ 51,264	$ 28,073	154	790	5.13	$ 144,010	W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1976	42	$ 136,157	65	$ 87,979	$ 48,179	154	790	5.13	$ 247,151	W1 - Mains - Average all Types
331	10" Ductile Iron Pipe	1976	42	$ 143,008	65	$ 92,405	$ 50,603	154	790	5.13	$ 259,586	W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	1976	42	$ 183,403	65	$ 118,507	$ 64,897	154	790	5.13	$ 332,911	W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1976	42	$ 67,431	40	$ 67,431	$ -					w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1976	42	$ 268,195	65	$ 173,295	$ 94,900	153	580	3.79	$ 359,751	M - Construction Equipment
354	Surface Restoration	1976	42	$ 375,474	15	$ 375,474	$ -					M - Construction Equipment
331	4" Gate Valve	1986	32	$ 2,033	10	$ 2,033	$ -	255	790	3.10	$ -	W1 - Mains - Average all Types
331	8" Gate Valve	1986	32	$ 5,467	10	$ 5,467	$ -	255	790	3.10	$ -	W1 - Mains - Average all Types
331	4" Ductile Iron Pipe	1986	32	$ 6,203	65	$ 3,054	$ 3,149	255	790	3.10	$ 9,756	W1 - Mains - Average all Types
331	6" Gate Valve	1986	32	$ 11,829	65	$ 5,824	$ 6,006	255	790	3.10	$ 18,606	W1 - Mains - Average all Types
331	12" Gate Valve	1986	32	$ 14,137	65	$ 6,960	$ 7,177	255	790	3.10	$ 22,235	W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	1986	32	$ 21,881	65	$ 10,772	$ 11,109	255	790	3.10	$ 34,416	W1 - Mains - Average all Types
331	16" Gate Valve	1986	32	$ 60,083	10	$ 60,083	$ -	255	790	3.10	$ -	W1 - Mains - Average all Types
331	12" Ductile Iron Pipe	1986	32	$ 69,753	65	$ 34,340	$ 35,413	255	790	3.10	$ 109,712	W1 - Mains - Average all Types
331	16" Ductile Iron Pipe	1986	32	$ 74,481	65	$ 36,668	$ 37,813	255	790	3.10	$ 117,148	W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1986	32	$ 107,314	65	$ 52,832	$ 54,483	255	790	3.10	$ 168,790	W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1986	32	$ 41,638	40	$ 33,310	$ 8,328	296	1,012	3.42	$ 28,471	w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1986	32	$ 127,752	65	$ 62,893	$ 64,859	280	580	2.07	$ 134,350	M - Construction Equipment
354	Surface Restoration	1986	32	$ 178,852	15	$ 178,852	$ -					M - Construction Equipment
331	8" Gate Valve	1996	22	$ 25,828	10	$ 25,828	$ -	339	790	2.33	$ -	W1 - Mains - Average all Types
331	6" Gate Valve	1996	22	$ 29,219	10	$ 29,219	$ -	339	790	2.33	$ -	W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	1996	22	$ 145,725	65	$ 49,322	$ 96,403	339	790	2.33	$ 224,655	W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	1996	22	$ 190,477	65	$ 64,469	$ 126,008	339	790	2.33	$ 293,646	W1 - Mains - Average all Types
335	Fire Hydrant Assembly	1996	22	$ 96,674	40	$ 53,171	$ 43,503	418	1,012	2.42	$ 105,324	w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	1996	22	$ 194,242	65	$ 65,743	$ 128,498	336	580	1.73	$ 221,813	M - Construction Equipment
354	Surface Restoration	1996	22	$ 271,939	15	$ 271,939	$ -					M - Construction Equipment
331	6" Gate Valve	2006	12	$ 2,483	10	$ 2,483	$ -	494	790	1.60	$ -	W1 - Mains - Average all Types
331	10" Gate Valve	2006	12	$ 6,305	10	$ 6,305	$ -	494	790	1.60	$ -	W1 - Mains - Average all Types
331	6" Ductile Iron Pipe	2006	12	$ 19,687	65	$ 3,634	$ 16,052	494	790	1.60	$ 25,670	W1 - Mains - Average all Types
331	16" Gate Valve	2006	12	$ 53,599	10	$ 53,599	$ -	494	790	1.60	$ -	W1 - Mains - Average all Types
331	12" Gate Valve	2006	12	$ 59,906	10	$ 59,906	$ -	494	790	1.60	$ -	W1 - Mains - Average all Types
331	10" Ductile Iron Pipe	2006	12	$ 68,387	65	$ 12,625	$ 55,761	494	790	1.60	$ 89,173	W1 - Mains - Average all Types
331	16" Ductile Iron Pipe	2006	12	$ 137,511	65	$ 25,387	$ 112,124	494	790	1.60	$ 179,308	W1 - Mains - Average all Types
331	8" Gate Valve	2006	12	$ 187,284	10	$ 187,284	$ -	494	790	1.60	$ -	W1 - Mains - Average all Types
331	12" Ductile Iron Pipe	2006	12	$ 639,043	65	$ 117,977	$ 521,066	494	790	1.60	$ 833,284	W1 - Mains - Average all Types
331	8" Ductile Iron Pipe	2006	12	$ 1,225,236	65	$ 226,197	$ 999,039	494	790	1.60	$ 1,597,653	W1 - Mains - Average all Types
335	Fire Hydrant Assembly	2006	12	$ 314,307	40	$ 94,292	$ 220,015	647	1,012	1.56	$ 344,135	w1 - Hydrants Installed
354	Excavation And Aggregate Backfill	2006	12	$ 838,380	65	$ 154,778	$ 683,602	461	580	1.26	$ 860,063	M - Construction Equipment
354	Surface Restoration	2006	12	$ 1,173,731	15	$ 938,985	$ 234,746	461	580	1.26	$ 295,342	M - Construction Equipment
339	Other Plant and Miscellaneous Equipment	2009	9	$ 235,611	40	$ 53,012	$ 182,598	536	687	1.28	$ 234,039	W1 - Structures and Improvements
334	Meters and Meters Installation	2015	3	$ 6,000	25	$ 720	$ 5,280	709	750	1.06	$ 5,585	W1 - Meter Installations
339	Other Plant and Miscellaneous Equipment	2015	3	$ 2,190	25	$ 263	$ 1,927	646	687	1.06	$ 2,049	W1 - Structures and Improvements
339	Other Plant and Miscellaneous Equipment	2015	3	$ 2,365	25	$ 284	$ 2,081	646	687	1.06	$ 2,213	W1 - Structures and Improvements
347	Miscellaneous Equipment	2015	3	$ 49,059	40	$ 3,679	$ 45,380	737	797	1.08	$ 49,074	W1 - Large treatment plant equipment
331	2016 Pine/Harrisburg Streets Replacement Project	2016	2	$ 1,614,679	65	$ 49,682	$ 1,564,997	750	790	1.05	$ 1,648,463	W1 - Mains - Average all Types
331	2017 Mulberry/Bessemer Replacement Project	2017	1	$ 248,802	65	$ 3,828	$ 244,974	772	790	1.02	$ 250,686	W1 - Mains - Average all Types
331	2017 Ugies Water Main Installation Project	2017	1	$ 522,565	65	$ 8,039	$ 514,526	772	790	1.02	$ 526,522	W1 - Mains - Average all Types
339	Other Plant and Miscellaneous Equipment	2017	1	$ 3,113	25	$ 125	$ 2,989	671	687	1.02	$ 3,060	W1 - Structures and Improvements
344	Laboratory Equipment	2017	1	$ 9,288	20	$ 464	$ 8,824	785	797	1.02	$ 8,958	W1 - Large treatment plant equipment
344	Laboratory Equipment	2017	1	$ 14,040	20	$ 702	$ 13,338	785	797	1.02	$ 13,542	W1 - Large treatment plant equipment
	Total			$ 13,548,833			$ 8,783,658.31				$ 12,711,129	

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NARUC Code	Asset	Original Year Installed / Purchase Date	Age	Estimated / Actual Original Cost	Useful Life	Accumulated Depreciation	Net Book Value	HW Index Value Orig	HW Index Value Present	HW Ratio	Trended Original Cost Less Depreciation	Notes
304	Building	1973	45	$ 1,043,330.13	80	$ 586,873.20	$ 456,456.93	100	687	6.87	$ 3,135,859	
304	Wet Well	1973	45	$ 25,001.17	80	$ 14,063.16	$ 10,938.01	100	687	6.87	$ 75,144	
304	Wet Well	1973	45	$ 21,009.31	80	$ 11,817.74	$ 9,191.58	100	687	6.87	$ 63,146	
304	Wet Well	1973	45	$ 3,362.07	20	$ 3,362.07	$ -					
304	Wet Well	1973	45	$ 777.54	25	$ 777.54	$ -					
304	Wet Well	1973	45	$ 840.52	25	$ 840.52	$ -					
304	Wet Well	1973	45	$ 185.30	25	$ 185.30	$ -					
304	Wet Well	1973	45	$ 2,699.59	25	$ 2,699.59	$ -					
304	Building	1973	45	$ 23,110.61	40	$ 23,110.61	$ -					
304	Building	1973	45	$ 294.30	15	$ 294.30	$ -					
304	Building	1973	45	$ 251.91	25	$ 251.91	$ -					
304	Building	1973	45	$ 105.37	25	$ 105.37	$ -					
304	Building	1973	45	$ 2,268.43	25	$ 2,268.43	$ -					
304	Building	1973	45	$ 472.34	25	$ 472.34	$ -					
304	Building	1973	45	$ 257.97	25	$ 257.97	$ -					
304	Building	1973	45	$ 525.63	15	$ 525.63	$ -					
304	Structure	1973	45	$ 1,050.04	40	$ 1,050.04	$ -					
304	Structure	1973	45	$ 209.52	40	$ 209.52	$ -					
304	Structure	1973	45	$ 2,101.29	40	$ 2,101.29	$ -					
304	Structure	1973	45	$ 7,623.72	40	$ 7,623.72	$ -					
304	Building	1973	45	$ 78,722.86	80	$ 44,281.61	$ 34,441.25	100	687	6.87	$ 236,611	
304	Building	1973	45	$ 181.67	25	$ 181.67	$ -					
304	Building	1973	45	$ 181.67	25	$ 181.67	$ -					
304	Structure	1973	45	$ 4,201.38	40	$ 4,201.38	$ -					
304	Structure	1973	45	$ 16,807.94	40	$ 16,807.94	$ -					
304	Structure	1973	45	$ 42,018.63	80	$ 23,635.48	$ 18,383.15	100	687	6.87	$ 126,292	
304	Structure	1973	45	$ 1,575.67	25	$ 1,575.67	$ -					
304	Structure	1973	45	$ 420.26	65	$ 290.95	$ 129.31	100	687	6.87	$ 888	
304	Structure	1973	45	$ 209.52	65	$ 145.06	$ 64.47	100	687	6.87	$ 443	
304	Structure	1973	45	$ 188.93	80	$ 106.28	$ 82.66	100	687	6.87	$ 568	The original construction cost of the water treatment plant, booster station, and
304	Structure	1973	45	$ 420.26	25	$ 420.26	$ -					
306	Water Intake Structure	1973	45	$ 21,009.47	80	$ 11,817.83	$ 9,191.64	100	559	5.59	$ 51,381	finished water storage tanks built in 1973
309	Water Intake Line	1973	45	$ 96,923.59	65	$ 67,100.94	$ 29,822.64	100	559	5.59	$ 166,709	was $2,527,558. The original construction
309	Water Intake Line	1973	45	$ 28,280.88	65	$ 19,579.07	$ 8,701.81	100	559	5.59	$ 48,643	cost per component is not known. W-1
309	Water Intake Line	1973	45	$ 8,676.47	25	$ 8,676.47	$ -					Collecting and Impounding Reservoirs
309	Piping and Appurtenances	1973	45	$ 181.67	65	$ 125.77	$ 55.90	100	790	7.90	$ 442	
309	Piping and Appurtenances	1973	45	$ 181.67	65	$ 125.77	$ 55.90	100	790	7.90	$ 442	
309	Piping and Appurtenances	1973	45	$ 363.34	25	$ 363.34	$ -					
309	Piping and Appurtenances	1973	45	$ 363.34	25	$ 363.34	$ -					
309	Piping and Appurtenances	1973	45	$ 363.34	25	$ 363.34	$ -					
309	Piping and Appurtenances	1973	45	$ 363.34	25	$ 363.34	$ -					
309	Piping and Appurtenances	1973	45	$ 363.34	25	$ 363.34	$ -					
311	Wet Well	1973	45	$ 37,817.25	20	$ 37,817.25	$ -					
311	Pumps	1973	45	$ 563,672.11	20	$ 563,672.11	$ -					
311	Pumps	1973	45	$ 3,060.50	20	$ 3,060.50	$ -					
311	Pumps	1973	45	$ 14,706.64	20	$ 14,706.64	$ -					
320	Liquefied Gas Chlorine System	1973	45	$ 168.35	40	$ 168.35	$ -					
320	Liquefied Gas Chlorine System	1973	45	$ 3,831.99	40	$ 3,831.99	$ -					
320	Liquefied Gas Chlorine System	1973	45	$ 2,715.33	40	$ 2,715.33	$ -					
320	Liquid Alum System	1973	45	$ 735.15	40	$ 735.15	$ -					
320	Liquid Alum System	1973	45	$ 4,104.49	40	$ 4,104.49	$ -					
320	Dry Lime System	1973	45	$ 16,955.69	40	$ 16,955.69	$ -					
320	Dry Lime System	1973	45	$ 3,027.80	40	$ 3,027.80	$ -					
320	Soda Ash System	1973	45	$ 3,027.80	40	$ 3,027.80	$ -					
320	WTP Equipment	1973	45	$ 37,218.96	25	$ 37,218.96	$ -					
330	Distribution Reservoirs	1973	45	$ 413,410.07	45	$ 413,410.07	$ -					
330	Distribution Reservoirs	1973	45	$ -	45	$ -	$ -					
330	Distribution Reservoirs	1973	45	$ -	45	$ -	$ -					
330	Distribution Reservoirs	1973	45	$ -	45	$ -	$ -					
330	Distribution Reservoirs	1973	45	$ -	45	$ -	$ -					
330	Distribution Reservoirs	1973	45	$ -	45	$ -	$ -					
334	Wet Well	1973	45	$ 1,229.29	25	$ 1,229.29	$ -					
334	Meters and Meters Installation	1973	45	$ 3,767.36	25	$ 3,767.36	$ -					
348	Other	1973	45	$ 1,090.01	15	$ 1,090.01	$ -					

Steelton Borough Authority
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NARUC Code	Asset	Original Year Installed / Purchase Date	Age	Estimated / Actual Original Cost	Useful Life	Accumulated Depreciation	Net Book Value	HW Index Value Orig	HW Index Value Present	HW Ratio	Trended Original Cost Less Depreciation	Notes
304	Structure	2010	8	See Notes								
304	Structure	2010	8	See Notes								
309	Piping and Appurtenances	2010	8	See Notes								Component included in the $2,959,000
309	Piping and Appurtenances	2010	8	See Notes								construction cost of the 2010 water
309	Piping and Appurtenances	2010	8	See Notes								treatment plant improvement project. Work
320	Wet Well	2010	8	See Notes								include refurbishing of the clarifier and filter
320	WTP Equipment	2010	8	See Notes								units. This cost is shown in the
334	Meters	2010	8	See Notes								"Clarification System" category.
336	Backflow Prevention Devices	2010	8	See Notes								
348	Other	2010	8	See Notes								
			8	$ 2,809,298.00	40	$ 561,859.60	$ 2,247,438.40	1,001	1,369	1.37	$ 3,073,670	W1 - Clarifier Equipment Installed
304	Structure	2017	1	See Notes								
309	Piping and Appurtenances	2017	1	See Notes								
309	Piping and Appurtenances	2017	1	See Notes								Component included in the $2,104,802
311	Pumps	2017	1	See Notes								construction cost of the 2017 water
311	Pumps	2017	1	See Notes								treatment plant improvement project.
334	Meters and Meters Installation	2017	1	See Notes								
339	Other Plant and Miscellaneous Equipment	2017	1	See Notes								
			1	$ 2,548,882.00	45	$ 56,641.82	$ 2,492,240.18	671	687	1.02	$ 2,551,668	W1 - Structures and Improvements
Total				**$ 21,455,028**			**$ 14,100,852**				**$ 22,243,034**	