Exhibit No.: Issues: Revenue Requirement, Capital Structure, Present Rate Revenues, Rate Base, Engineered Coatings, Allowance for Funds Used During Construction, Depreciation Expense, Amortization Expense, OPEB Expense, Rate Case Expense, Affiliate Transactions, Credit Card Fees, and Property Taxes Brian W. LaGrand Witness: Exhibit Type: Rebuttal Sponsoring Party: Missouri-American Water Company Case No.: WR-2020-0344 Date: January 15, 2021

#### MISSOURI PUBLIC SERVICE COMMISSION

#### CASE NO. WR-2020-0344

#### **REBUTTAL TESTIMONY**

#### OF

#### **BRIAN W. LAGRAND**

#### **ON BEHALF OF**

#### **MISSOURI-AMERICAN WATER COMPANY**

#### AFFIDAVIT

I, Brian W. LaGrand, under penalty of perjury, and pursuant to Section 509.030, RSMo, state that I am Director of Rates and Regulatory Support for Missouri-American Water Company, that the accompanying testimony has been prepared by me or under my direction and supervision; that if inquiries were made as to the facts in said testimony, I would respond as therein set forth; and that the aforesaid testimony is true and correct to the best of my knowledge and belief.

'nM

Brian W. LaGrand January 15, 2021

#### REBUTTAL TESTIMONY BRIAN W. LAGRAND MISSOURI-AMERICAN WATER COMPANY CASE NO. WR-2020-0344

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#### **REBUTTAL TESTIMONY REVENUE REQUIREMENT**

#### **BRIAN W. LAGRAND**

#### **I. INTRODUCTION**

1	Q.	Please state your name and business address.
2	А.	My name is Brian W. LaGrand, and my business address is 727 Craig Road, St. Louis,
3		Missouri 63141.
4	Q.	Are you the same Brian W. LaGrand who previously submitted direct testimony in
5		this proceeding?
6	A.	Yes.
7		II. OVERVIEW
8	Q.	What is the purpose of your revenue requirement rebuttal testimony in this
9		proceeding?
10	A.	The purpose of my revenue requirement rebuttal testimony is to respond to the Staff Report
11		on Cost of Service ("COS Report") filed by the Missouri Public Service Commission
12		("Commission") Staff ("Staff"), and to the direct testimony of the Office of the Public
13		Counsel ("OPC") and other intervenors on the following topics:
14		1) Revenue Requirement; 2) Capital Structure; 3) Present Rate Revenues; 4) Rate
15		Base; 5) Engineered Coatings; 6) Allowance for Funds Used During Construction; 7)
16		Depreciation Expense; 8) Amortization Expense; 9) Rate Case Expense; and, 10) Affiliate
17		Transactions.

1		III. REVENUE REQUIREMENT
2	Q.	Did Staff propose a revenue requirement in the Staff Report filed on November 24,
3		2020?
4	A.	Yes. Staff proposed a revenue requirement of \$282,391,719, which is a \$39,820,223
5		reduction to Staff's calculated present rate revenues of \$322,211,942, using Staff's mid-
6		point after-tax return of 6.33%. Additionally, Staff included \$19,896,569 for an estimate
7		of items that will be included in the true up (through December 31, 2020), which increases
8		the revenue requirement by \$19,896,576 for a total Company revenue requirement of
9		\$302,288,288.
10	Q.	How does Staff's revenue deficiency compare to the deficiency calculated by the
11		Company and filed in direct testimony?
12	A.	The Company requested additional revenues of \$107,508,840, which results in a difference
13		of \$147,417,290. When Staff's true up estimate is included, the gap shrinks to
14		\$127,432,494. In either case, there are significant differences between the Company's
15		position and Staff's position.
16	Q.	How does Staff's total recommended revenue requirement compare to the revenues
17		MAWC is currently authorized by the Commission to collect?
18	A.	MAWC is currently authorized to collect \$351,302,500. In other words, Staff is taking a
19		position that MAWC should collect revenues that are \$68,910,781 less than what the
20		Commission is currently authorizing MAWC to collect, or \$49,014,781 less with its true
21		up estimate.
22	Q.	What was the Company's authorized revenue requirement in Case No. WR-2017-

#### 1 0285?

A. The total authorized revenue requirement in Case No. WR-2017-0285 was \$318,256,160,
which is \$13,086,401 higher than what Staff is recommending in this case despite the
Company having invested over \$500 million in capital projects since that rate case.

### 5 Q. The Company requested a future test year in this case. What did the Commission 6 order regarding the test period in this case?

A. In its Order Setting Test Year and Adopting Procedural Schedule, the Commission ordered
the parties to use a historic test year ending December 2019, with an update period through
June 2020, and a true up period through December 2020, and further ordered that the parties
may propose discrete adjustments to the June 2020 known and measurable revenue
requirement calculation. Additionally, the Company is required to provide a revenue
requirement calculation as of June 30, 2020, and December 31, 2020.

#### 13 Q. When will the Company provide the ordered revenue requirement calculations?

A. The Company is providing the June 30, 2020 revenue requirement with this round of
testimony. The December 31, 2020 revenue requirement, along with the Company's
proposed discrete adjustments will be provided to the parties after the true up data has been
compiled.

#### 18 Q. What is the Company's June 30, 2020 revenue requirement?

A. June 30, 2020 revenue requirement is \$375,521,620 and more detailed calculations are
included as Schedule BWL-1.

#### 21 Q. What discrete adjustments will the Company propose at the time the December 31,

1		2020 revenue requirement is provided?
2	A.	At this time, the Company is expecting to propose the following discrete adjustments:
3		• Utility Plant in Service additions net of Contributions through May 2021;
4		• Additional Accumulated Reserve and changes in Accumulated Deferred Income
5		Taxes on December 2020 Utility Plant through May 2021;
6		• Increased labor expenses due to union contract price changes or non-union merit
7		increases, and changes to labor related items that are based on the wage rate $-$
8		payroll taxes, 401K and DCP expense;
9		• Contractual price increases for Insurance Other than Group;
10		COVID-19 AAO amortization;
11		• Increased United States Postal Service rates that take effect January 24, 2021;
12		• Contractual changes or other known price changes for production costs; and
13		• The Company's billing determinants and projected usage.
	0	
14	Q.	Why is the Company proposing these adjustments?
15	A.	Including these projections will help better match the cost of service the Company will
16		incur during the first year new rates are in effect. All plant MAWC proposes to include
17		will be in service and used and useful prior to new rates taking effect. Additionally, all the
18		price changes will be known and measurable before rates take effect in this case.
10	0	Will the Commons he addressing the second consistence of differences between it and
19	Q.	Will the Company be addressing the revenue requirement differences between it and
20		other parties in rebuttal testimony?
21	A.	Yes. The largest difference is in regard to the cost of capital and capital structure. MAWC
22		witness Ann Bulkley will be discussing cost of capital, and addressing Staff witness Suong
23		Joun Won's recommended 9.55% return on equity and Office of the Public Counsel

1		("OPC") witness David Murray's recommended 9.25% return on equity, and both Staff
2		and OPC's recommendation to utilize the consolidated national capital structure, rather
3		than that of MAWC. MAWC witnesses Nikole Bowen and Todd Wright will be addressing
4		most of the operating expense issues. MAWC witness Greg Roach and I will be discussing
5		revenues. Mr. Roach will address declining customer base usage, and I will discuss present
6		rate revenues. I will address any rate base issues along with depreciation and amortization
7		expense. Lastly, MAWC witness John Wilde will address the different proposals for
8		returning Excess Accumulated Deferred Income Taxes to customers.
9	Q.	Will the Company be providing true up data in this case?
10	А.	Yes. The Company will submit true up data by January 29, 2021, as previously agreed
11		among the parties.
12	Q.	Does the Company agree with the list of true up items Staff provides on pages 11 and
12 13	Q.	Does the Company agree with the list of true up items Staff provides on pages 11 and 12 of the Staff Report – Cost of Service?
	<b>Q.</b> A.	
13		12 of the Staff Report – Cost of Service?
13 14		<ul><li>12 of the Staff Report – Cost of Service?</li><li>Yes, with a few additions. The Company will also provide true up information on main</li></ul>
13 14		<ul><li>12 of the Staff Report – Cost of Service?</li><li>Yes, with a few additions. The Company will also provide true up information on main</li></ul>
13 14 15		<ul> <li>12 of the Staff Report – Cost of Service?</li> <li>Yes, with a few additions. The Company will also provide true up information on main break expense, Rate J normalization, and customer usage through December 2020.</li> </ul>
13 14 15 16	А.	<ul> <li>12 of the Staff Report – Cost of Service?</li> <li>Yes, with a few additions. The Company will also provide true up information on main break expense, Rate J normalization, and customer usage through December 2020.</li> <li><u>IV. CAPITAL STRUCTURE</u></li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>	А. <b>Q.</b>	12 of the Staff Report – Cost of Service?         Yes, with a few additions. The Company will also provide true up information on main         break expense, Rate J normalization, and customer usage through December 2020.         IV. CAPITAL STRUCTURE         Did other parties recommend adjustments to the Company's capital structure?
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	А. <b>Q.</b>	<ul> <li>12 of the Staff Report – Cost of Service?</li> <li>Yes, with a few additions. The Company will also provide true up information on main break expense, Rate J normalization, and customer usage through December 2020.</li> <li><u>IV. CAPITAL STRUCTURE</u></li> <li>Did other parties recommend adjustments to the Company's capital structure?</li> <li>Yes. Both Staff and OPC made capital structure recommendations. Please see the rebuttal</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	А. <b>Q.</b>	<ul> <li>12 of the Staff Report – Cost of Service?</li> <li>Yes, with a few additions. The Company will also provide true up information on main break expense, Rate J normalization, and customer usage through December 2020.</li> <li><u>IV. CAPITAL STRUCTURE</u></li> <li>Did other parties recommend adjustments to the Company's capital structure?</li> <li>Yes. Both Staff and OPC made capital structure recommendations. Please see the rebuttal testimony of Company witnesses Ann Bulkley and James Merante for further discussion of capital structure.</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	А. <b>Q.</b>	<ul> <li>12 of the Staff Report – Cost of Service?</li> <li>Yes, with a few additions. The Company will also provide true up information on main break expense, Rate J normalization, and customer usage through December 2020.</li> <li><u>IV. CAPITAL STRUCTURE</u></li> <li>Did other parties recommend adjustments to the Company's capital structure?</li> <li>Yes. Both Staff and OPC made capital structure recommendations. Please see the rebuttal testimony of Company witnesses Ann Bulkley and James Merante for further discussion</li> </ul>

22 Q. What level of present rate revenues did Staff calculate?

- 1 A. Staff calculated present rate revenues of \$322,211,942, including both water and sewer
- 2 revenues.<sup>1</sup>

#### 3 Q. How does this compare to the Company's calculation?

- 4 A. In Company Accounting Schedule ("CAS") 8, provided with my direct testimony, the
- 5 Company calculated present rate revenue of \$313,662,858.

#### 6 Q. What is the difference between the Company's calculation and Staff's calculation?

7 A. Based on the company's original filing, the difference is \$8,549,084:

			Table BWL-1
	MAWC	Staff	Difference
Residential	\$198,537,066	\$209,359,622	\$10,822,556
Commercial	61,163,429	57,275,971	(3,887,458)
Industrial	13,696,002	17,919,485	4,223,483
Other Public Authority	6,546,992	6,237,774	(309,218)
Sale for Resale	11,369,712	9,850,906	(1,518,806)
Private Fire	5,051,555	5,135,628	84,073
Miscellaneous Revenue	331,047		(331,047)
Other Revenues	5,849,166	5,438,751	(410,415)
Total Water Revenues	\$302,544,969	\$311,218,137	\$8,673,168
Total Sewer Revenues	11,117,889	10,993,805	(124,084)
Total Present Rate Revenue	\$313,662,858	\$322,211,942	\$8,549,084

#### 8

#### 9 Q. What are the main drivers of this difference?

A. As you can see, the most substantial difference is in the residential water revenues. This
is primarily driven by customer usage assumptions. Additional differences include
customer counts, and a calculation issue with Staff's residential usage in the Other Missouri
service area and Commercial and Residential meters in St. Louis County. I will describe
and comment on those issues below.

#### 15 Q. Are there other areas of concern in Staff's calculation of present rate revenues?

<sup>&</sup>lt;sup>1</sup> Staff Accounting Schedule 9, Total Company, Line REV-14.

A. Yes. I will explain in detail those Staff assumptions the Company disagrees with,
 specifically related to the levels of Rate J usage and the methodology for calculating the
 customer charges. Additionally, the Company included the impact of expected reduced
 usage from select large customers, which Staff did not include in its calculations.

5

#### a. RESIDENTIAL REVENUES

# Q. Please describe Staff's approach to calculating residential present rate water revenues.

A. For all residential customers, Staff calculated a simple five-year (60-month) average of
daily usage per customer through June 30, 2020, with recently acquired systems having
shorter periods based on the available data<sup>2</sup>. That per customer usage was then applied to
the annualized meter count as of June 30, 2020, using the Company's currently approved
tariffs to determine total volumetric residential revenues. The same meter count was used
to calculate the fixed residential revenues, also using the currently approved tariffs<sup>3</sup>.

### 14 Q. How does this compare to the Company's approach to projecting present rate 15 residential water revenues?

A. As I described in my direct testimony<sup>4</sup>, the Company began with average customers for
 2019, and added customers through organic growth. To determine usage, the Company
 calculated an adjustment for declining customer usage. This usage projection per customer
 is applied to the number of customers to determine total usage. Company witness Greg
 Roach will be addressing declining usage in his rebuttal testimony.

<sup>&</sup>lt;sup>2</sup> COS Report, p. 43.

<sup>&</sup>lt;sup>3</sup> COS Report, p. 44.

<sup>&</sup>lt;sup>4</sup> LaGrand DT, p. 20.

1

Q.

#### Does the Company agree with Staff's methodology or projected usage levels?

A. No, we do not. Staff's methodology is flawed because using a simple 60-month average
fails to account for the declining trend in usage. Staff provides limited rationale for this
methodology beyond saying that usage patterns have changed for various reasons. Again,
Company witness Greg Roach addresses this question in greater detail in his rebuttal
testimony.

# 7 Q. What is the overall impact of the difference in residential customer usage 8 assumptions?

A. As shown in Table BWL-2, the differences are somewhat equally split between St. Louis
County and Other MO Water. Staff's usage per customer is almost 6,000 gallons per year
higher in St. Louis County and almost 10,000 gallons per year higher outside of St. Louis
County. In both service areas, the difference is at least one additional month of usage for
each residential customer. Staff's approach would essentially say the Company is
receiving revenue on 13 (not 12) months of usage each year.

				Table BWL-2
	Annual Usage (000 gallons)			Annual
	Customers	per Customer	Total	Revenue
MAWC Assumptions				
St. Louis County	317,951	73.1	23,233,717	\$111,089,695
Other MO Water	115,587	51.0	5,897,264	36,897,158
Total	433,537	67.2	29,130,981	\$147,986,853
Staff Assumptions				
St. Louis County	309,992	78.9	24,467,979	\$116,991,193
Other MO Water	115,634	60.5	6,994,125	43,773,489
Total	425,626	73.9	31,462,104	\$160,764,682
Differences				
St. Louis County	(7,959)	5.9	1,234,261	\$5,901,498
Other MO Water	47	9.5	1,096,861	6,876,331
Total	(7,911)	6.7	2,331,123	\$12,777,829

Note: Staff number for Other MO Water includes incorrect usage that Staff will correct.

<sup>15</sup> 

1	Q.	Are there any corrections to the projections the Company thinks Staff should make?
2	A.	Yes, there are a few. The Company has previously discussed these matters with Staff and
3		it is my understanding that these corrections will be made. First, there was an inadvertent
4		calculation error in the average daily usage amount for the Other MO Service Area. Staff
5		used 0.1656 for average daily usage, while the correct amount under Staff's methodology
6		should be 0.1558. This difference overstates present rate revenue by \$2,629,702. Second,
7		Staff will be making minor changes to the customer counts used to calculate the average
8		daily usage. These changes could have a minor impact on the 0.1558 average daily usage
9		mentioned above.
10	Q.	Did other parties file testimony concerning residential customer usage?
10	Q.	Did other parties me testimony concerning residential customer usage.
11	A.	Yes, OPC witness Lena Mantle provided testimony on usage. Company witness Roach
12		will address the issues raised in Ms. Mantle's testimony.
13	Q.	Given the significance of the residential usage assumptions, what do you recommend
15	Q٠	
14		to the Commission?
15	A.	I recommend the Commission adopt the Company's usage projections, which are based on
16		robust statistical analysis, and reject Staff's proposed five year average.
17	Q.	If the Commission were to adopt a five year average for residential customers, do you
18		have any recommendations regarding the appropriate time period for the average?
19	A.	First, as stated above, the Company believes that Mr. Roach's calculations are far more
20		accurate and based on actual data and nationally recognized trends. However, in the event
21		the Commission were to utilize a five year average, the average should be included in the

true-up and taken over the five year period ending with December 2020. This is the most
 recent period used and will capture the most recent effect of declining use per customer.

# Q. Why does the Company disagree with Staff's calculation of present rate fixed residential revenues?

5 A. To determine the fixed, or customer, charge, Staff annualized the meter count as of June 6 30, 2020<sup>5</sup>. The Company disagrees with this approach because it will overstate the annual 7 revenues. The Company will have more active meters in June than in December. This is 8 due to people turning on service to vacation homes, utilizing irrigation meters, etc. An 9 improvement to Staff's approach would be to use a 12 month average of the meter count 10 to determine the fixed revenue. Annualizing the June 2020 meter count rather than using 11 a 12 month average overstates the residential fixed charges by \$173,048.

#### 12 Q. Is that the only issue the Company has with Staff's proposed fixed charge revenues?

A. No. Staff inadvertently excluded meter charges for St. Louis County customers that used
 a rate category that does not collect the monthly service line replacement charge that
 MAWC collects on behalf of St. Louis County. Excluding these meter charges understates
 present rate revenues by \$1,651,723.

#### 17 Q. Are there any other residential revenue issues to address?

18 A. Yes. The Company currently has a low-income pilot program for customers in St. Joseph,

19 Parkville, and Brunswick. This program provides an 80% discount on the fixed charge for

<sup>&</sup>lt;sup>5</sup> Staff Cost of Service Report, page 44.

1		qualifying customers. In this case, the Company has proposed continuing this pilot
2		program. In calculating the present rate revenues, Staff did not include the pilot program.
3	Q.	Did any other parties address residential revenues?
4	A.	Yes. Both OPC and MIEC have also addressed residential usage. Company witness Greg
5		Roach will be responding to their proposals.
6	Q.	MIEC claims that the Company's revenue requirement would be increased by \$14.7
7		million if MIEC's recommendation for residential usage is implemented. Do you
8		agree with that assessment? <sup>6</sup>
9	A.	No. The customer usage has no impact on the overall revenue requirement. The revenue
10		requirement is based on rate base, the pre-tax cost of capital and expenses. The customer
11		usage is an important part of the billing determinants used in the rate design, but it does
12		not impact the revenue requirement.
13	Q.	MIEC seems to be concerned that using a low level of customer usage would result in
14		the Company collecting more than its authorized revenues. Is the Company
15		proposing anything to address that concern?
16	А.	Yes. In the direct testimony of Company witness John Watkins, the Company has
17		proposed a Revenue Stabilization Mechanism ("RSM") that would protect against the very
18		concern expressed by MIEC.
19		<b>b. NON-RESIDENTIAL REVENUES</b>
20	Q.	What is the overall impact of the difference in non-residential customer usage

<sup>&</sup>lt;sup>6</sup> Meyer DT, p. 39

#### 1 assumptions?

2	А.	The non-residential usage assumptions for Staff and the Company are much closer than for
3		residential customers. However, Staff's assumptions result in present rate revenue that is
4		\$3,824,840 higher than the Company assumptions. See the Table BWL-3 below for the
5		details of the differences.

							Table BWL-3
			<u>Annual</u>	Usage (000 gal	lons)		Annual
	Rate A	Rate B	Rate J	Rate F	Special	Total Usage	Revenue
MAWC Assumptio	ons						
St. Louis County	7,764,374	1,604,927	3,903,658	43,995	2,418,830	15,735,783	\$50,870,974
Other MO Water	3,118,545	1,194,536	2,669,912	2,003	974,569	7,959,565	31,329,967
Total	10,882,919	2,799,463	6,573,570	45,998	3,393,399	23,695,349	\$82,200,941
Staff Assumptions	;						
St. Louis County	7,995,830	1,606,148	4,277,628	43,339	2,394,737	16,317,681	\$52,507,047
Other MO Water	3,279,722	1,224,870	2,827,301	3,108	1,243,853	8,578,854	33,518,735
Total	11,275,552	2,831,017	7,104,929	46,447	3,638,590	24,896,535	\$86,025,782
Differences							
St. Louis County	231,456	1,221	373,970	(656)	(24,094)	581,898	\$1,636,073
Other MO Water	161,177	30,334	157,389	1,105	269,284	619,289	2,188,768
Total	392,633	31,555	531,359	449	245,191	1,201,187	\$3,824,840

6

### 7 Q. Please describe Staff's approach to calculating non-residential present rate water

#### 8 revenues.

A. As with residential usage, Staff used a simple 60 month average of non-residential usage,
and annualized the meter count as of June 30, 2020 to determine the customer charges for
commercial, industrial, other public authority, and most sale for resale customers. In
Warrensburg, St. Charles, and Joplin, Staff used the update period usage to reflect
operational changes. For special contracts, Staff also used a 60 month average.

#### 14 Q. How does this compare with the Company's methodology?

A. The Company used a 36 month average for commercial customers outside of St. Louis
 County, and all industrial, and Other Public Authority customers. A 36 month average is
 more reflective of recent trends in lower usage among non-residential customers. Including

60 months of usage dramatically overstates the expected usage. For Commercial customers
 in St. Louis County, the Company projected declining usage. Please see the testimony of
 Company witness Greg Roach for discussion of the declining use adjustments. The
 Company used actual billing determinants to set the level of customer charges.

#### 5 Q. What impact do these methodology differences have on present rate revenues?

A. Staff's non-residential usage assumptions result in \$3,824,840 of additional present rate
revenue. The higher overall usage increases present rate revenue by \$5,619,699. This is
offset by Staff's assumptions of Rate J normalization, which reduces present rate revenues
by \$1,665,208, and sale for resale contract pricing differences of \$129,650. These
differences are detailed in Table BWL-4.

			Table BWL-4
	Annua	al Volumetric Rev	<u>/nue</u>
	STL County	Other Water	Total
Commercial			
Toal Usage	(\$449,748)	(\$563,994)	(\$1,013,742)
Rate J Normalization	623,265	355,258	978,523
Total Commercial Differences	\$173,517	(\$208,737)	(\$35,220)
Industrial			
Total Usage	\$3,537,390	\$3,420,522	\$6,957,913
Rate J Normalization	(1,788,841)	(903,846)	(2,692,688)
Total Industrial Difference	\$1,748,549	\$2,516,676	\$4,265,225
OPA			
Total Usage	(\$192,857)	(\$170,314)	(\$363,171)
Rate J Normalization	38,655	10,302	48,957
Total OPA Differences	(\$154,203)	(\$160,012)	(\$314,215)
SFR			
Total Usage	(\$18,973)	\$53,908	\$34,934
Contract Prices	(109,682)	(19,968)	(129,650)
Total SFR Differences	(\$128,655)	\$33,940	(\$94,715)
Fire Service			
Total Usage	\$3,766		\$3,766
Total Differences	\$1,642,974	\$2,181,867	\$3,824,841

11

#### 12 Q. What does the Company disagree with Staff's calculation of present rate fixed

#### 1 revenues for non-residential customers?

2 A. As with residential customer charges, there are two issues. First, Staff annualized the 3 meters as of June 30, 2020. Using a 12 month average of meters during the year will 4 provide a more accurate estimate of the meters. As shown in table BWL-5, annualizing 5 the meters as of June 30, 2020, overstates present rate revenue by \$69,097. Second, Staff 6 inadvertently excluded meter charges for St. Louis County commercial customers that used 7 a rate category that does not collect the monthly service line replacement charge that 8 MAWC collects on behalf of St. Louis County. Excluding these meter charges understates 9 present rate revenues by \$3,985,628.

					Table BWL-5
		Non Res	idential Meter	<u>Counts</u>	
	Commercial	Industrial	ΟΡΑ	SFR	Totals
Annualized Meter	rs - June 2020				
St. Louis County	16,849	108	796	0	17,753
Other MO Water	9,635	251	1,105	38	11,029
Total	26,484	359	1,901	38	28,782
12M Average of N	Aeters - June 20	)20			
St. Louis County	16,886	108	797	0	17,791
Other MO Water	9,570	252	1,088	40	10,950
Total	26,456	360	1,885	40	28,741
Differences					
St. Louis County	(37)	0	(1)	0	(38)
Other MO Water	65	(1)	17	(2)	79
Total	28	(1)	16	(2)	41
Revenue Impact	(62,921)	(295)	(8,370)	2,488	(69,097)

10

### Q. Does the Company have any other issues related to Staff's proposed non-residential revenues?

13 A. Yes. In my direct testimony, I discussed an adjustment the Company made to reflect the

14 impact of projected usage reductions by certain large commercial and industrial

1		customers <sup>7</sup> . Staff did not address this adjustment in its direct testimony.
2	Q.	Did other parties address non-residential revenues?
3	A.	Yes. MIEC addressed the usage levels for commercial customers.
4	Q.	MIEC witness Meyer suggests, as he did with residential usage, that the Company
5		usage assumption is too low, and would increase the revenue requirement. Do you
6		agree with that assessment?
7	A.	No. See the discussion of this earlier in my testimony about residential revenues. The
8		usage does not impact the overall revenue requirement, but is important for rate design. If
9		MIEC is concerned the Company would collect too much revenue with that usage
10		assumption, the Company's proposed RSM would alleviate those concerns for commercial
11		customers.
12		<u>c. SEWER REVENUES</u>
13	Q.	What are the overall differences between Staff's and the Company's calculation of
14		sewer present rate revenues?
15	A.	As shown in Table BWL-1, the Company calculated present rate sewer revenues of
16		\$11,117,889, which is \$124,084 higher than Staff's calculation of \$10,993,805 <sup>8</sup> .
17	Q.	What are the main drivers of the differences?
18	A.	The calculation of present rate revenues on the Arnold sewer system are responsible for
19		\$56,379 of the difference. The Other Missouri Sewer systems are responsible for \$24,623

of the difference, and miscellaneous fees are \$45,798 of the difference. Most of the 20

 <sup>&</sup>lt;sup>7</sup> LaGrand Dir., page 21
 <sup>8</sup> Staff Accounting Schedule 9, Total Sewer

1 differences are due to minor differences in usage and customer count assumptions. The 2 details of the differences in miscellaneous fees is shown below. 3 d. OTHER REVENUES 4 Q. Are there differences between Staff's and the Company's calculation of Miscellaneous 5 and Other Revenues? 6 A. Yes. Staff has included \$784,549 less in Miscellaneous and Other Revenues than the 7 Company. The differences are outlined in Table BWL-9.

			Table BWL-6
	MAWC	Staff	Difference
Miscellaneous Revenue	\$331,047	\$0	(\$331,047)
After Hours Charge	112,707	115,096	2,390
Collections for Others	5,950	9,856	3,906
Misc Service	454,706	433,081	(21,625)
Frozen Meters	3,952	4,064	113
Usage Data	375,658	375,658	0
Rents	863,635	685,865	(177,770)
NSF Check Charges	112,920	98,566	(14,354)
Application Fees	1,621,354	2,552,566	931,212
Reconnection Fees	603,859	456,529	(147,329)
Late Fees	1,694,426	707,470	(986,956)
Total Water	\$6,180,214	\$5,438,752	(\$741,462)
Miscellaneous Revenue	\$793	\$0	(\$793)
After Hours Charge	0	935	935
Misc Service	4,190	7,665	3,476
NSF Check Charges	1,284	1,628	344
Reconnection Fees	1,452	1,186	(266)
Late Fees	81,167	34,384	(46,783)
Total Sewer	\$88,091	\$45,798	(\$42,294)
Total Misc & Other	\$6,269,098	\$5,484,550	(\$784,549)

8

#### 9 Q. Can you explain how Staff calculated Miscellaneous and Other revenues?

A. Yes. For most categories, Staff calculated a three year or less average of the miscellaneous
 items<sup>9</sup>, which is similar to the approach taken by the Company. For revenues related to the

<sup>&</sup>lt;sup>9</sup> Staff Report – Cost of Service, page 46.

1		provision of customer usage data to other entities for billing purposes and for rents, Staff
2		used the most recent 12 months. For late fees, Staff used a two year average.
3	Q.	Has Staff indicated any changes they plan to make to Miscellaneous and Other
4		Revenues?
5	А.	Yes. Staff has indicated they will be modifying their calculations to utilize the update
6		period amount for late fees and reconnection fees.
7	Q.	Does the Company agree with Staff's calculations of Miscellaneous and Other
8		revenues?
9	A.	The Company will address agreement with Miscellaneous fees in surrebuttal testimony
10		after seeing the impact of Staff's changes mentioned above.
11		VI. RATE BASE
12	Q.	What is Staff's recommended rate base?
13	A.	Staff recommends a rate base of \$1,408,979,475. <sup>10</sup>
14	Q.	Pease explain how Staff developed its recommended rate base.
15	A.	Staff utilized the Company's updated rate base as of June 30, 2020, of \$1,572,549,366,
16		which was provided by the Company as part of the first update in this case. From that
17		starting point, Staff made a variety of adjustments, which I will address in more detail
18		below, resulting in a rate base reduction of \$163,569,805.
19	Q.	Did Staff, or any other intervenors, address the Company's 13-month average rate
20		base included in the future test year?

<sup>&</sup>lt;sup>10</sup> Staff Accounting Schedule 2, Total Company

1	A.	No, they did not. Staff witness Kim Bolin addressed the future test year concept as a theory
2		and discussed specific items for the Commission to consider if it elected to implement a
3		future test year. <sup>11</sup> Staff indicated it will provide specific comments regarding the details of
4		the Company's future test year proposal in rebuttal testimony.
5		a. NET UTILITY PLANT IN SERVICE
6	Q.	Please explain what adjustments Staff made to Utility Plant in Service and to
7	C	Accumulated Depreciation Reserve.
8	A.	Staff made one adjustment that impacted Net Utility Plant in Service. This adjustment was
9		to remove \$20,998 from Accumulated Reserve related to depreciation expense in a land
10		account.
11	Q.	Does the Company agree with Staff's adjustment to Accumulated Reserve related to
12		land accounts?
13	A.	The Company agrees with Staff's \$20,998 adjustment to Accumulated Reserve.
14		<b>b. NET CONTRIBUTIONS IN AID OF CONSTRUCTION</b>
15	Q.	Did Staff make any adjustments to Contributions in Aid of Construction?
16	А.	No.
17		<u>c. PREPAYMENTS</u>
18	Q.	Please explain the adjustments Staff made for prepayments.
19	A.	Staff included a 13 month average of the prepayments balance through June 30, 2020. This
20		results in a \$2,830,152 increase in rate base.

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<sup>&</sup>lt;sup>11</sup> Staff Report – Cost of Service, pages 4-11

Q.	Does the Company agree with Staff's adjustment?
A.	Yes, the Company agrees with the adjustment.
	d. WORKING CAPITAL
Q.	Please explain Staff's cash working capital recommendation.
A.	Staff included \$1,004,236 in cash working capital with rate base offsets for taxes of
	\$8,439,758 and for interest expense of \$4,318,036. This results in a total reduction to rate
	base of \$11,753,558 of negative cash working capital.
Q.	Did Staff conduct a lead / lag study to determine working capital requirement?
A.	No. Staff utilized the analysis performed by the Company and included in the response to
	Staff DR 0123. However, Staff made several significant adjustments to the Company's
	analysis.
Q.	Please explain Staff's adjustments to the Company's methodology.
A.	Staff adjusted the Company's methodology to use "miscellaneous cash vouchers" to
	determine the lag on Service Company costs, eliminated check clearing days, eliminated
	the preferred stock dividends, and excluded many costs because they were alleged to be
	"excessive".
Q.	Please explain the adjustment for Service Company expense lag.
A.	Staff rejected the Company's treatment of Service Company costs in the analysis and
	substituted its "miscellaneous cash vouchers" calculation to calculate the Service Company
	expense lag. Staff takes issue with the Company paying the Service Company bill in the
	first half of the month in which services are provided. The actual payment for these
	А. Q. A. Q. А.

services results in an expense lead of 4.77 days. Staff utilizes a positive lag of 75.34 days.<sup>12</sup>
 Staff believes this practice is contrary to the treatment of payments to other vendors, and
 is simply done due to the affiliate relationship between MAWC and the Service Company.

# 4 Q. Does the Company agree with Staff's approach in calculating the Service Company 5 expense lag?

6 A. No. The Service Company bills its affiliates in advance for its service. This is recognized 7 in the 4.77 day payment lead calculated by the Company. By utilizing a 75.34 expense day 8 lag, Staff has made the assumption that the Service Company bills in arrears for the service 9 it provides. It does not. If the Service Company billed in arrears it would have an additional cash working capital requirement and would have to pass the cost of that cash 10 11 working capital along to MAWC. Because Staff has made no corresponding adjustment 12 to reflect these increased costs if the Service Company were to bill in arrears, Staff has created a "gap" that unfairly and improperly deprives the Company of cash working 13 14 capital. The Company's methodology, which yielded the 4.77 day payment lead, is correct.

### 15

#### Q. Is the Service Company the only vendor that the Company pays in advance?

- 16 A. No. The Company pays many vendors in advance for items such as software licenses,
  17 prepaid maintenance fees and insurance.
- 18 Q. The Company receives an annual assessment from the Commission. Can you describe
   19 the payment terms?
- A. The assessment year begins on July 1, and the first quarterly payment is due on July 15,
  with subsequent payments due in October, January and April. In other words, the

<sup>&</sup>lt;sup>12</sup> Staff's Working Capital Workpaper - Barron

1		assessment paid to the Commission is paid in advance, just as the Service Company.
2	Q.	What would the Company recommend if the Commission rejected a 4.77 day payment
3		lead?
4	A.	Since nearly all the Service Company costs are labor and labor related, supporting the
5		operations of Missouri-American, the Company would propose Staff use the same expense
6		lag as for MAWC labor costs – 12.00 days.
7	Q.	Are there other issues the Company has with Staff's approach?
8	A.	Yes. First the Company excluded many standard expense categories such as maintenance,
9		building maintenance, and transportation. The Company believes these items should be
10		included in the working capital calculations. Second, Staff netted Pension and OPEB costs
11		together. This is the incorrect treatment. Since the OPEB costs are negative, as it currently
12		is over-funded, there is no lag to consider. The OPEB costs should be excluded from
13		Staff's calculations.
14	Q.	Does the Company accept Staff's adjustment to eliminate check clearing days and to
15		eliminate the preferred stock dividends?
16	A.	Yes, for purposes of this case, the Company is willing to accept these adjustments.
17		e. TANK PAINTING TRACKER
18	Q.	Please explain the adjustments Staff made to the Tank Painting Tracker.
19	A.	Staff removed the remaining balance in the Tank Painting Tracker. This tracker was
20		eliminated in Case No. WR-2015-0301 and will be fully amortized in June 2021.
21	Q.	Does the Company agree with Staff's adjustment?

1 A. Yes.

2		<u>f. REGULATORY DEFERRALS</u>
3	Q.	Please explain any adjustments Staff made to regulatory deferrals.
4	А.	Staff did not specifically address regulatory deferrals in direct testimony, but did not
5		include any regulatory deferrals in its rate base calculation.
6	Q.	What regulatory deferrals did the Company include in rate base in this case?
7	A.	There were four items included in rate base in both the initial filing and the June 2020
8		update information. As described in my Direct Testimony, the Company included costs of
9		the pipeline funded by Emerald Pointe, but owned by the city of Hollister, receivership
10		fees related to the acquisition of Hickory Hills water & sewer, acquisition costs of
11		Woodland Manor, and deferred costs for customer owned lead service line replacements.
12	Q.	Please explain the background of the Emerald Pointe pipeline.
13	A.	In order to eliminate a failing sewer treatment plant, Emerald Pointe built a pipeline to a
14		treatment plant owned by the City of Hollister. The pipeline started in Emerald Point's
15		legacy certificated area, continued into certificated area granted for purposes of the pipeline
16		(Case No. SA-2012-0362), and then crossed into the city limits of the City of Hollister.

- 17 The project was placed into service in January of 2013.
- 18 Q. Did Emerald Pointe own the entire pipeline?

A. No. As part of their agreement with the City of Hollister, Emerald Point was required to
contribute to the City the portion of the pipeline within the Hollister city limits. The
construction costs associated with that portion of pipeline were \$323,321.

#### 1

2

### Q. Did the Commission review Emerald Pointe's decision to construct the pipeline to Hollister's treatment plant prior to construction?

A. Yes. As part of the certificate case mentioned above (SA-2012-0362), the Commission
reviewed the project. In fact, Staff's recommendation<sup>13</sup> in that case concluded the pipeline
was reasonable and cost effective. Additional benefits included the elimination of the
existing treatment facility, elimination of sewage discharge into Table Rock Lake and
having additional capacity available for future customers.

# 8 Q. Did the Commission have any other opportunities to address the regulatory treatment 9 of the portion of the pipeline in Hollister?

10 Yes. The Company acquired Emerald Pointe water and sewer in 2014 (WO-2014-0113 A. 11 and SO-2014-0116). At the time of the acquisition, Emerald Pointe had just recently 12 completed a rate case (SR-2013-0016 and WR-2013-0017), in which the unamortized cost 13 of the pipeline was given rate base treatment. The Company relied on that rate case 14 outcome when acquiring Emerald Pointe, and in the acquisition case, there was no 15 discussion of anything other than full rate base treatment. In fact, Staff included the unamortized portion as rate base in their recommendation in that case.<sup>14</sup> Rate base 16 17 treatment is both appropriate and consistent with how it has been treated by the 18 Commission in multiple regulatory proceedings.

#### 19 Q. Please explain the background of the Hickory Hills water and sewer acquisition.

A. The Hickory Hills Water and Sewer system had long been a troubled system, which had
fallen into receivership in 2007 and was in noncompliance with DNR regulations and

<sup>&</sup>lt;sup>13</sup> Staff Recommendation, SA-2012-0362, page 4

<sup>&</sup>lt;sup>14</sup> Staff Recommendation, WO-2014-0013 and SO-2014-0016, page 6

permit effluent limitations. The Company's acquisition solved a long-standing problem
for the Hickory Hills customers. The Hickory Hills receiver had taken out personal loans
to cover some of the ongoing costs, and to reimburse two customers for sewer backup
damage. The net book value of the assets was less that the amount of the debt, so in order
to complete the sale of the assets, the Company was required to pay more than net book
value. The purchase price paid by the Company was also approved by the Circuit Court of
Cole County, Missouri.

# 8 Q. What did the Commission order in the Hickory Hills acquisition case (WA-20169 0019)?

A. Among the standard items in an acquisition order, the Commission order included two
 items of significance<sup>15</sup>. First, the Company was to combine the Hickory Hills water and
 sewer customers with the St. Louis Metro service area for ratemaking purposes. Second,
 the Company was to establish a regulatory asset for the additional payment above the net
 book value, and amortize it over 60 months, beginning the first month after closing.

#### 15 Q. Please explain why the Company included the Hickory Hills receiver fees in rate base.

A. As with any acquisition, the purchase price paid by the Company is an outlay of capital.
 Discretionary capital can be deployed in a variety of ways, including acquiring troubled
 systems. As Staff stated in its Memorandum<sup>16</sup>, "In Staff's view, the proposed payment
 made by MAWC to Hickory Hills that allows Mr. Cover reimbursement of a portion of his
 outstanding receivership fees and to pay off the personal loan was a reasonable and

<sup>&</sup>lt;sup>15</sup> WA-2016-0019, Order Denying Request for Public Hearings and Granting Application with Conditions, pages 11-15.

<sup>&</sup>lt;sup>16</sup> WA-2016-0019, Staff Memorandum, page 4, October 2, 2015.

1		necessary investment by MAWC to enable transfer assets of a "troubled" utility under
2		receivership to an experienced utility operator." The full purchase price of the Hickory
3		Hills system is the Company's investment, and as such, the Company should be allowed
4		its authorized return on this investment by including the full amount in rate base.
5	Q.	What did the Commission order in the Woodland Manor acquisition case (WM-2016-
6		0169)?
7	A.	Among other things, the Commission authorized MAWC to record transaction costs up to
8		a maximum of \$40,000 as a deferred debit, and to amortize that balance over five years <sup>17</sup> .
9	Q.	Please explain why the Company included the Woodland Manor transition costs in
10		rate base.
11	A.	As with any acquisition, the purchase price paid by the Company is an outlay of capital.
12		The full purchase price of the Woodland Manor system is the Company's investment, and
13		as such, the Company should be allowed its authorized return on this investment by
14		
		including the full amount in rate base.
15	Q.	What did the Commission order in the Company's last rate case with regard to the
15 16	Q.	
	<b>Q.</b> A.	What did the Commission order in the Company's last rate case with regard to the
16		What did the Commission order in the Company's last rate case with regard to the replacement of customer owned lead service lines?
16 17		What did the Commission order in the Company's last rate case with regard to the replacement of customer owned lead service lines? In Case No. WR-2017-0285, the Commission order two things related to the replacement

 <sup>&</sup>lt;sup>17</sup> WM-2016-0169, Order Approving Stipulation and Agreement, page 2, May 3, 2016.
 <sup>18</sup> WR-2017-0285, Report and Order, page 23

1		authorized to continue deferring lead service line replacement costs, and apply a carrying
2		cost equal to the Company's long term debt rate to the unamortized balance <sup>19</sup> .
3	Q.	Did Staff include the replacement of customer owned lead lines in its revenue
4		requirement?
5	A.	No, it did not. It's our understanding Staff will be addressing this issue in rebuttal
6		testimony.
7	Q.	Did Staff address the Company's proposal to include the unamortized balance in rate
8		base where it would earn the Company's cost of capital?
9	A.	No, it did not.
10	Q.	Are there any additional issues related to regulatory deferrals?
11		Vac. The Company has recently received enproved for an Accounting Authority Order in
	А.	Yes. The Company has recently received approval for an Accounting Authority Order in
12	А.	Case No. WU-2020-0417.
12 13	А. <b>Q.</b>	
		Case No. WU-2020-0417.
13	Q.	Case No. WU-2020-0417. What did the Commission approve in Case No. WU-2020-0417?
13 14	Q.	Case No. WU-2020-0417. <b>What did the Commission approve in Case No. WU-2020-0417?</b> In that case, the Commission approved the stipulation of the parties to allow the Company
13 14 15	Q.	Case No. WU-2020-0417. What did the Commission approve in Case No. WU-2020-0417? In that case, the Commission approved the stipulation of the parties to allow the Company to defer certain COVID-19 related costs net of savings and waived fees from March 1,
13 14 15 16	Q.	Case No. WU-2020-0417. What did the Commission approve in Case No. WU-2020-0417? In that case, the Commission approved the stipulation of the parties to allow the Company to defer certain COVID-19 related costs net of savings and waived fees from March 1, 2020 through March 31, 2021, unless extended by agreement of the parties or Order of the

 <sup>&</sup>lt;sup>19</sup> WR-2017-0285, Report and Order, page 17
 <sup>20</sup> Order Approving Non-Unanimous Stipulation and Agreement in Case No. WU-2020-0417.

update this amount through the true up period and will propose a discrete adjustment
 beyond the true up period.

3 g. ACCUMULATED DEFERRED INCOME TAXES 4 Does the Company have any issues with the Accumulated Deferred Income Taxes О. 5 ("ADIT") included in rate base by Staff? 6 A. Yes. There are two issues with the number staff included for ADIT. First, the Company 7 provided an updated ADIT workpaper as of June 30, 2020 that included revised ADIT 8 amounts. However, the Staff used the original version. The update will decrease rate base 9 by \$2,256.221. Second, Staff double counted the Excess ADIT balance in its rate base 10 calculations. This results in rate base being under stated by \$148,103,888. The Company 11 has discussed these issues with Staff and our understanding is they will be revising these calculations. 12 13 h. PENSION AND OPEB TRACKERS 14 **O**. Does the Company have any issues with Staff's calculation of the Pension and OPEB 15 tracker balances? 16 A. Yes. For both items, there are differences in Staff's calculation and the Company's 17 calculation. 18 What are the differences in the Pension tracker? **Q**. 19 A. The difference results from the timing of the change in Pension Expense and tracker 20 amortization after the Company's last rate base. This results in Staff's calculation 21 overstating the tracker balance by \$79,984. What are the differences in the OPEB tracker? 22 **Q**.

1	А.	As with the Pension tracker there are some timing differences, which understate the tracker
2		balance by \$237,201. Additionally, there is a minor error in Staff's number that understates
3		the balance by \$10,003, and Staff excluded OPEB retiree reimbursements, which
4		overstates the tracker balance by \$6,884.
5		VII. ENGINEERED COATINGS
6	Q.	Did any party address the Company's proposal to capitalize engineered coatings?
7	A.	Yes. MIEC addressed the proposal. No other party has yet addressed the Company's
8		proposal.
9	Q.	Does MIEC witness Greg Meyer support the Company proposal to capitalize
10		engineered coatings?
11	A.	No, he does not. Please see the rebuttal testimony of Company witness Jeffrey Kaiser who
12		addresses this topic further.
13	Q.	MIEC witness Meyer suggests that the Company is requesting \$5.2 million of tank
14		painting expense in this case. Is that accurate?
15	A.	No. In my Direct Testimony, I noted that if the Commission does not allow the Company
16		to capitalize engineered coatings, then an additional \$3,328,924 should be added to the
17		revenue requirement. <sup>21</sup> That assessment was based on the Company having already
18		removed all tank painting costs from the base year when determining the revenue
19		requirement, so \$3,328,924 would be the total amount included.

### 20 Q. What adjustment does MIEC propose to the Company's revenue requirement?

<sup>&</sup>lt;sup>21</sup> LaGrand DT, p. 25

A. MIEC proposes a reduction to MAWC's revenue requirement of \$3.3 million.<sup>22</sup> If MIEC's goal is to include \$1,896,370 in the cost of service for tank painting, the correct adjustment is to increase the revenue requirement by \$1,896,370, as the Company currently does not have any expense in the revenue requirement for tank painting. Mr. Meyer's proposal would actually result in negative \$3.3 million of tank painting expense.

#### 6

#### VIII. ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION

### 7 Q. Did other parties have recommendations related to the calculation of the Allowance

#### 8 for Funds Used During Construction ("AFUDC") included within rate base?

9 A. Yes. OPC made the following recommendations: 1) remove \$20 million of utility plant
10 from rate base due to an alleged "over booking" of AFUDC; 2) change the methodology
11 MAWC uses to calculate AFUDC; and, 3) if the methodology isn't changed, then a change
12 should be made to MAWC's cost of capital calculation.

#### 13 Q. What is the basis for OPC's recommendations?

A. OPC witness Schallenberg claims that the AFUDC recorded on MAWC's books exceeds
the amount prescribed by the Commission's rules adopting the NARUC's Uniform System
of Accounts ("USOA") issued 1973, as revised in 1976 (Schallenberg DT, page 3), by not
including short term debt within the calculation of the AFUDC rate.

#### 18 Q. Does the Company agree with OPC's recommendations?

19 A. No.

#### 20 Q. What does the USOA adopted by the Commission say about AFUDC?

<sup>&</sup>lt;sup>22</sup> Meyer DT, p. 36

1	А.	In Plant Accounting Instruction 3(17) it states: "AFUDC includes the net cost for the period
2		of construction of borrowed funds used for construction purposes and a reasonable rate on
3		other funds when so used."
4	Q.	Does the USOA prescribe a formula to be applied when calculating AFUDC or
5		require a specific methodology?
6	A.	No, it does not.
7	Q.	OPC witness Schallenberg discusses the description of the AFUDC calculation in the
8		Company's Annual Report to the Commission. How is the calculation described in
9		the Annual Report?
10	A.	The Annual Report states the AFUDC rate is the " weighted cost of capital as determined
11		in the most recent rate order " <sup>23</sup>
12	Q.	Please explain how the Company calculates AFUDC.
13	A.	The Company develops an AFUDC rate each month based on actual balances during the
14		prior month for short term debt, long term debt, preferred stock and equity. The actual
15		interest expense, along with the amortization of debt costs, are used to determine an actual
16		cost of debt. To calculate the AFUDC equity rate, the Company uses a 10.0% Return on
17		Equity. <sup>24</sup> . The AFUDC rate can change on a month-to-month basis and is not static. The
18		detailed monthly calculations of the Company's AFUDC rates are included at Schedule
19		BWL-3 and were provided in the Company's response to OPC DR 1113.

<sup>&</sup>lt;sup>23</sup> MAWC 2019 annual report to the Commission, p. F-23 <sup>24</sup> In the Stipulation and Agreement in Case No. WR-2017-0285, the parties agreed to an ROE range of 9.5% to 10.0%, p. 2-3.

Q. Does the Company's methodology for calculating AFUDC include short term debt?
 A. Yes, it does.

3 Q. Does the Company apply 100% of its short term debt to construction projects before
4 using other financing, as OPC witness Schallenberg recommends?

- 5 A. No.
- 6 Q. Why does the Company not apply 100% of its short term debt to construction
  7 projects?

A. The Company receives cash flows from a variety of sources, including customer payments,
and short term debt. The internally generated funds and debt financing are fungible and
are both used for a variety of items, including capital spending, employee payroll, general
taxes, and payments to vendors for maintenance expense. To assume that 100% of the
short term debt is financing construction ignores the daily cash needs of the Company to
support its operating functions.

14

#### Q. When did the Company begin using the current methodology?

A. The Company's current methodology has been in place for almost two decades. As noted within the surrebuttal testimony of MAWC witness Edward J. Grubb in Case No. WR-2003-0500 the Company began using the actual capital structure each month to calculate the AFUDC (i.e., the current AFUDC method) after the prior MAWC and St. Louis County rate cases The reason for the change was driven by the Commission's preference to using known costs in determining the level of AFUDC, as reflected in the Report and Order in Case No. WR-2000-0181. As noted by Mr. Grubb:

22 "The Company was also concerned about the impact in calculating AFUDC
23 after the merger of MAWC and St. Louis County Water Company. The last

1 2 3 4 5 6 7		St. Louis County rate case did not address the AFUDC issue. This concerned the Company because it indicated that the Commission was not being consistent in its regulatory treatment of two separate water utilities. After the merger, the Company could not easily use separate AFUDC rates within its financing reporting system. It was therefore decided prior to the merger to use the actual capital structure each month in determining the AFUDC rate." <sup>25</sup>
8	Q.	Has the Company had subsequent rate cases since this change whereby the
9		Commission and other parties reviewed the calculation?
10	A.	Yes. The Company has completed six general rate cases since 2003, all of which included
11		rate base specific to AFUDC calculated consistent with this methodology.
12	Q.	Has the Commission required MAWC to change its methodology in any of these
13		Orders?
14	A.	No.
15	Q.	Why does the Annual Report to the Commission include a different description?
16	A.	The definition in MAWC's Annual Report is incomplete by not mentioning short term debt
17		is included in the calculation. The Company will include this additional language with the
18		filing of the 2020 report with the Commission.
19	Q.	What does the Company recommend the Commission decide in this case?
20	A.	The Company would recommend the Commission formally authorize the Company's
21		current AFUDC methodology. If the Commission determines an alternative methodology
22		is more appropriate, that change should be prospective, and not retroactive. OPC witness
23		Schallenberg recommends an adjustment to reduce rate base by approximately \$20 million,

<sup>&</sup>lt;sup>25</sup> Case No. WR-2003-0500, Grubb ST, p. 10.

representing his hypothetical calculation back to 2002. If the Commission were to find in favor of this position, the result would be a write-off of these amounts by the Company, a financially crippling result for the Company. As I previously noted, all amounts calculated and included in rate base and depreciated as utility plant from 2002 through 2017 have already been reflected in MAWC rates and charges through Commission approved Orders.

#### 6 Q. Does OPC's recommendation raise any legal issues?

A. Based upon advice of counsel, it appears that OPC's recommendation would call into play
both the statutory prohibition against collateral attack on final orders and decisions of the
Commission (Section 386.550, RSMo) and, possible principles of estoppel.

#### 10 Q. Have any conditions changes since MAWC began using its current methodology?

A. No. The methodology used by the Company is substantially the same, as is the
Commission's rule and the version of the USOA utilized by the Commission.

## Q. Has MAWC relied on the actions of the Commission and parties over the last 17-year period, perhaps to its detriment?

A. Yes. The Company has booked its AFUDC over that period in reliance on the results of
the prior six rate cases. The OPC proposal to now go back and restate AFUDC for that
period would very much result in detriment to the Company as a result of the likely,
immediate write-off of approximately \$20 million in assets. Given these facts, the
Commission should not, and likely cannot, require any adjustment to historical rate base
amounts.

1		IX. DEPRECIATION EXPENSE
2	Q.	What aspects of depreciation expense will you address?
3	A.	I will address the depreciation rate recommendations of Staff, as well as Staff's proposed
4		capitalization of certain amounts of depreciation costs.
5	Q.	Company witness Larry Kennedy completed a depreciation study included as part of
6		his direct testimony in this case. Did Staff address the depreciation study in their
7		testimony?
8	A.	No. Staff indicated they were still evaluating the depreciation study.
9	Q.	What was Staff's overall recommendation regarding Depreciation rates?
10	A.	Staff recommended the Company continue to use the Depreciation rates established in the
11		Company's last rate case (WR-2017-0285), and that the Company should use mass
12		property depreciation certain NARUC accounts where the Company had recommended
13		amortization (Staff Report – pages 47-49).
14	Q.	Does the Company agree with this preliminary recommendation?
15	A.	The Company does not agree with Staff's preliminary recommendation. As provided in
16		the direct testimony of Company witness Kennedy in this case, the Company's proposed
17		methodology is reasonable and properly supported. The Company will specifically address
18		and respond to Staff's position, if present, in the Company's surrebuttal testimony.
19	Q.	Please explain Staff's recommendation for the Company to capitalize certain
20		depreciation costs.
21	A.	In the Staff Report - Cost of Service, Staff states that "capitalized expenses include

depreciation expense associated with assets used in construction such as power operated
 equipment and transportation equipment."<sup>26</sup> Staff then goes on to argue that "[c]apitalized
 depreciation expenses must be subtracted from the depreciation expense calculated using
 MAWC's total plant-in-service balances in order to prevent double recovery."

# 5 Q. Does the Company agree with Staff's recommendation regarding capitalized 6 depreciation?

A. No, we do not. The assets have already been capitalized once and depreciation expense is
being recovered currently in rates. There is no "double recovery" or "double
capitalization" in this case. By capitalizing costs that have already been capitalized, the
effect is to recover costs associated with shorter lived assets over a longer period. This will
result in intergenerational equity issues, as ratepayers of tomorrow will pay more so today's
ratepayers pay less.

#### 13 Q. Please describe the adjustment Staff made to capitalize depreciation expense?

A. Staff totaled depreciation expense for NARUC accounts 392, 392.1, 392.2, 392.3, 392.4,
393, 394 and 396, which was \$1,793,366 for the twelve months ended June 30, 2020. Staff
applied a 45.48% capitalization rate and excluded \$977,743 from the Company's
depreciation expense.

## 18 Q. Does the Company agree with Staff's adjustment to capitalize this portion of

## 19 depreciation expense?

20 A. No, we do not. The Commission approved depreciation rates for these assets range from

21 3.45% to 7.71%, and have a weighted average depreciation rate of 5.38% or just under 19

<sup>&</sup>lt;sup>26</sup> COS Report, p. 49

years. By capitalizing these costs into other longer lived assets, Staff is creating the
 intergenerational equity issue discussed above.

# 3 Q. Are there any other issues with depreciation expense the Company would like to address?

5 A. Yes. When the Company acquired the Woodland Manor, Benton County Sewer, and 6 Jaxson Estates Sewer, the Commission orders in those cases directed the Company to adopt 7 the existing Commission approved depreciation rates for those systems. In the Stipulation 8 and Agreement in the Company's last rate case, the Company agreed to continue using the 9 depreciation rates authorized in Case No: WR-2015-0301. The Company would propose 10 that the three acquired systems be placed on the depreciation rates ultimately approved in 11 this case.

12

#### X. AMORTIZATION EXPENSE

#### 13 Q. Please describe any adjustments Staff made to Amortization expense.

14 A. Staff did not address any Amortization expense in the Company's future test year and made 15 adjustments to the update information provided as of June 30, 2020. First, Staff excluded 16 any amortization related to the Tank Painting Tracker as it will be fully amortized with the 17 effective date of new rates in this case. Second, Staff annualized the amortization of the 18 MSD plant capacity for the Arnold Sewer system, the City of Hollister pipeline, Hickory 19 Hills Water and Sewer, and the Lead Service Line Replacement Costs authorized in Case 20 No. WR-2017-0285. Third, Staff excluded amortization related to AFUDC regulatory 21 assets. Lastly, Staff included amortization for two new regulatory assets: costs from the 22 Company's low income pilot program, and costs associated with Rogue Creek Water and 23 sewer.

1

0.

#### Does the Company agree with Staff's proposed adjustments?

2 A. Partially. Staff has included amortization of the new regulatory assets over a period of 36 3 months for the low income pilot program and 60 months for Rogue Creek costs. This is 4 the same proposal made by the Company. MAWC agrees with these amortization periods. 5 and the annual amortization of \$60,182 for Rogue Creek. The annual amortization for the 6 low income program through June 30, 2020 is \$6,208, and this amount will be updated 7 through December 31 during the true up in this case. The historic test year amortization 8 related to the MSD plant capacity included expense consistent with the amounts included 9 in the Company's last rate case. Staff has again included that annual expense going 10 forward, and the Company agrees. However, there are some additional capital charges that 11 the Company has received from the St. Louis Metropolitan Sewer District for the treatment 12 plant. The Company has included those additional costs in the regulatory asset and are amortizing them consistent with the treatment of the other Arnold costs. The additional 13 14 deferrals were inadvertently excluded from the Company's response to Staff DR 0173 and 15 will be included in the next update to DR 0173. The Company does not agree with the 16 elimination of amortization related to the AFUDC regulatory assets.

# 17 Q. Did Staff explain why it excluded the amortization related to AFUDC regulatory 18 assets?

A. No. Staff makes an adjustment in its Accounting Schedules,<sup>27</sup> but does not provide any
 explanation of the adjustment in its direct testimony.

### 21 Q. Please describe the AFUDC regulatory assets being amortized.

<sup>&</sup>lt;sup>27</sup> Staff Accounting Schedule 9, Total Company, page 3 of 4, lines 105-107.

1 A. There are two types of AFUDC regulatory assets. The first is related to the gross up for 2 AFUDC equity. This regulatory asset reflects the tax gross up of the equity portion of 3 AFUDC that is recorded in construction work in progress. The second is related to the tax gross up treatment required with the implementation of FAS 109, issued in February 1992 4 5 relative to AFUDC Debt. Prior to the implementation of FAS 109, AFUDC Debt amounts 6 were recorded to plant net of tax. After 1993, AFUDC Debt amounts are recorded to plant 7 pre-tax instead of net of tax. The regulatory asset account represents the amounts that tax 8 gross up that would have been recorded to plant on investments made prior to 1993.

#### 9 Q. Why should the amortization of these regulatory assets by included in rates?

10 A. The balances in these regulatory assets represents AFUDC costs that would otherwise be 11 capitalized into utility plant and recovered through depreciation expense. The amortization 12 of the regulatory assets should be treated no differently than depreciation expense and 13 included in rates. Beginning in the years after the implementation of FAS 109, the 14 Company chose to change the way the tax effects of AFUDC were handled. AFUDC Debt 15 is now recorded on a pre-tax basis rather than after-tax. For transition purposes, the 16 amounts recorded on a pre-tax basis before the change were restated in a regulatory asset. 17 As a result, the cost of service impacts are no longer seen on a net basis in tax expense, but 18 instead are seen on a gross basis in pre-tax income. For AFUDC Equity, a similar 19 mechanical choice was made. Instead of having the effects of AFUDC Equity flow as cost 20 of service embedded in the tax computation, the amounts are grossed up to pre-tax amounts 21 and carried in pre-tax regulatory assets. As a result, denying the amortization amounts is 22 not allowing the Company full recovery of its AFUDC amounts.

23 Q. Are there any additional issues related to Amortization Expense?

А.	Yes, there are two. The first is related to recently approved Accounting Authority Order
	in Case No. WU-2020-0417. I discussed the regulatory deferral earlier in my testimony,
	but I would also like to address amortization expense related to this deferral. The second
	is related to the Stipulation & Agreement in Case No. WR-2017-0285.
Q.	What amortization period would the Company propose for the COVID-19 deferrals?
A.	The Company is proposing a 36 month amortization period.
Q.	Did Staff include any adjustments for these items in amortization expense?
A.	No.
Q.	Did the Stipulation & Agreement in the Company's last rate case include any
	adjustments to amortization expense?
A.	Yes. As part of the agreement on the treatment of Excess Accumulated Deferred Income
A.	Taxes, the parties agreed that the Company could accelerate the amortization of regulatory
А.	
Α.	Taxes, the parties agreed that the Company could accelerate the amortization of regulatory
Α.	Taxes, the parties agreed that the Company could accelerate the amortization of regulatory assets related to the National Call Center and Shared Services Center. It was agreed that
А. <b>Q</b> .	Taxes, the parties agreed that the Company could accelerate the amortization of regulatory assets related to the National Call Center and Shared Services Center. It was agreed that the unamortized balance of these regulatory assets would be amortized over the same
	Taxes, the parties agreed that the Company could accelerate the amortization of regulatory assets related to the National Call Center and Shared Services Center. It was agreed that the unamortized balance of these regulatory assets would be amortized over the same period as the unprotected ADIT liabilities, not to exceed 10 years. <sup>28</sup>
Q.	Taxes, the parties agreed that the Company could accelerate the amortization of regulatory assets related to the National Call Center and Shared Services Center. It was agreed that the unamortized balance of these regulatory assets would be amortized over the same period as the unprotected ADIT liabilities, not to exceed 10 years. <sup>28</sup> <b>Did any parties include this amortization adjustment?</b>
	А. <b>Q.</b> А. <b>Q.</b>

<sup>&</sup>lt;sup>28</sup> WR-2017-0285 Stipulation & Agreement, p. 4

1		XI. OPEB EXPENSE
2	Q.	Does the Company have any issues with Staff's calculation of OPEB expense?
3	A.	Yes. Staff included (\$2,737,527) for Union medical in their calculation and the Company
4		excluded Union medical from its calculations.
5	Q.	Why did the Company exclude Union medical?
6	A.	The amounts would be subject to a 100% tax if withdrawn. Internal Revenue Code 4976
7		imposes a 100% excise tax on any disqualified benefits paid from an employer sponsored
8		fund. A disqualified benefit includes a reversion of fund assets to the benefit of the
9		employer.
10	Q.	What does the Company recommend in this case?
11	A.	MAWC recommends that Staff also exclude the Union medical amounts from their
12		calculation of OPEB expense.
13		XII. RATE CASE EXPENSE
14	Q.	Please describe the adjustments Staff made to Rate Case Expense.
15	А.	Staff examined costs incurred through September 30, 2020, excluding accrued legal costs,
16		accrued taxes, and Service Company costs. After sharing 50% of costs, Staff included
17		\$110,359 of eligible costs in its calculation, which it amortized over 36 months, resulting
18		in \$36,771 of annual amortization expense. Staff also included 100% of the costs of the
19		depreciation study, which are amortized over 60 months, resulting in an additional \$19,887
20		of amortization expense, for a total of \$56,657, in annual Rate Case Expense.
21	Q.	How does this compare to the Company's requested treatment of rate case costs?
22	A.	It is quite different. The Company proposed a total of \$1,778,375 in costs associated with

1		this rate case. The Company proposed to amortize this balance over 36 months, resulting
2		in \$568,292 of annual rate case expense.
3	Q.	Does the Company agree with Staff's calculation of rate case expense?
4	A.	No, we do not.
5	Q.	Does the Company agree with Staff's proposed sharing of costs?
6	A.	No, we do not.
7	Q.	Did any other party address rate case expense?
8	A.	Yes. OPC witness Amanda Conner discussed rate case expense. OPC discusses a variety
9		of sharing mechanisms, but supports a sharing based on the ratio of the revenue
10		requirement granted vs. the revenue requirement requested. <sup>29</sup> Later in her testimony, OPC
11		witness Conner indicates a 50% sharing arrangement is also acceptable, and includes
12		\$75,394 for a 3-year amortization, not including the depreciation study. <sup>30</sup>
13	Q.	Does the Company agree with OPC's proposal?
14	A.	Only in part. The Company agrees with OPC that the costs should be amortized over 36
15		months. The Company does not agree with the other parts of OPC's recommendation.
16	Q.	Does Staff challenge the reasonableness of the Company's rate case expense costs
17		themselves or identify which particular costs should be disallowed?
18	A.	No. Staff did exclude Service Company costs for work on the rate case, pending review of

 <sup>&</sup>lt;sup>29</sup> Conner DT, p. 3
 <sup>30</sup> Conner DT, p. 5-6

- MAWC;s response to Staff DR 0217.3, provided by the Company on November 18, 2020.
- 1

15

#### 2 Q. Did Staff propose a sharing mechanism for rate case expense?

- 3 A. Yes. As indicated above, Staff has proposed sharing the rate case expense equally between
- 4 customers and shareholders.

#### 5 Q. What was the basis for Staff's cost sharing recommendation?

- 6 A. Staff claims the rationale for the cost sharing recommendation is based on the following
- 7 allegations:

8 1) Rate case expense sharing creates an incentive and eliminates a 9 disincentive on the utility's part to control rate case expenses to 10 reasonable levels. MAWC has a great deal 1 of control over how much 11 rate case expense it has incurred. MAWC determined when and how it 12 would file this case. Further, in filing this case, MAWC has hired several 13 outside consultants and attorneys to help present MAWC's case instead 14 of using in-house personnel.

16 2) Both ratepayers and shareholders benefit from the rate case process. 17 The ratepayer is receiving the opportunity to be provided safe and 18 adequate service at a just and reasonable rate and the shareholder is 19 receiving an opportunity to receive an adequate return on investment. In 20 this case MAWC is requesting an ROR of 7.78% while Staff is 21 requesting 6.33%. The higher RORs benefit the shareholders versus the 22 ratepayers. MAWC has also requested the elimination of credit card fees, 23 capitalization of tank painting expense and other items that MAWC 24 wants in its cost of service. 25

26 3) It is fair and equitable to expect shareholders to carry a reasonable 27 portion of the rate case burden. Staff has not applied the 50/50 sharing 28 mechanism to the cost of the required depreciation study. There is a high 29 probability that some recommendations advocated by MAWC through 30 the rate case process will ultimately be found by the Commission to not 31 be in the public interest. In this case, MAWC has proposed the issues of 32 future test year and RSM. Future test year is an issue that has not been 33 accepted by the Commission in any previous rate case<sup>31</sup>.

### 34 Q. Do you agree with Staff's recommendation?

<sup>&</sup>lt;sup>31</sup> COS Report, p. 58-59

A. No, I do not. The Company should not be penalized for needing to seek a rate increase.
 There are a large variety of factors that go into setting rates. A significant deviation in any
 one could necessitate the Company's request to recover its actual cost of service. Declining
 consumption levels is a good example of such a deviation and is one that is out of the
 Company's control.

#### 6 Q. Do you have any issues with Staff's rationale for proposing a sharing mechanism?

7 A. Yes, I have several. In point 1, Staff argues that the Company has hired outside consultants 8 rather than using in-house personnel. I would note that in this case, the Company is using 9 in house personnel for the Class Cost of Service study and rate design, which had 10 previously been done by an outside consultant. The Company has used many internal 11 resources from Service Company for the preparation of this rate case, yet as noted above, 12 Staff has not yet decided to recommend inclusion of these costs. In point 2, Staff suggests 13 the Company's request for a 7.78% rate of return only is to the benefit of shareholders. 14 This is false. MAWC competes for capital with other American Water regulated utilities. 15 A higher rate of return will attract more capital, allowing the Company to make additional 16 needed infrastructure investments, which provide benefits to the customers. Staff also has 17 indicated that the Company is requesting the elimination of credit card fees, but that is not 18 entirely accurate. We are requesting that credit card fees be included in the cost of service 19 (and Staff agrees), which will be of great benefit for our customers. In point 3, I will 20 acknowledge that Staff has not proposed sharing of required items such as the depreciation 21 study, and the cost of the customer notices for local public hearings in this case. However, 22 a Revenue Stabilization Mechanism is a two way mechanism. It protects both the 23 Company and the customers as the customers will receive a credit when water sales are 1 greater than contemplated in the rate case.

2	Q.	In point 1, Staff claims that this arbitrary disallowance "provides an incentive for the
3		Company to control its costs." Does the Company need any such incentive?
4	A.	No. We are quite cautious and careful when we submit our rate case expense. All the
5		Staff proposal does is to disallow expenses that we've proven to be prudently and
6		reasonably incurred in order to present our rate case claims.
7	Q.	Has Staff or any other party demonstrated that any element of MAWC's rate case
8		expense is overstated or unreasonable?
9	A.	No, they have not. There is no evidence questioning the reasonableness of the Company's
10		costs to litigate this rate case. Staff's recommendations are nothing more than an approach
11		to reduce the Company's recovery of legitimate and prudently incurred costs.
12	Q.	Assuming for sake of argument that a portion of the Company's rate case expense
13		should be shared among customers and shareholders, are there certain expenses that
13 14		should be shared among customers and shareholders, are there certain expenses that should not be shared under any circumstances?
	A.	
14	A.	should not be shared under any circumstances?
14 15	A.	<pre>should not be shared under any circumstances? Yes. Rate case expenses incurred by the Company as a result of Commission mandates</pre>
14 15 16	A.	<ul><li>should not be shared under any circumstances?</li><li>Yes. Rate case expenses incurred by the Company as a result of Commission mandates should not be shared. For example, to the extent the Company is required to prepare and</li></ul>
14 15 16 17	A.	should not be shared under any circumstances? Yes. Rate case expenses incurred by the Company as a result of Commission mandates should not be shared. For example, to the extent the Company is required to prepare and submit a Depreciation Study, a Class Cost of Service Study, Minimum Filing
14 15 16 17 18	A.	should not be shared under any circumstances? Yes. Rate case expenses incurred by the Company as a result of Commission mandates should not be shared. For example, to the extent the Company is required to prepare and submit a Depreciation Study, a Class Cost of Service Study, Minimum Filing Requirements, or other study or report, the costs associated with those mandates should not
14 15 16 17 18 19	A.	should not be shared under any circumstances? Yes. Rate case expenses incurred by the Company as a result of Commission mandates should not be shared. For example, to the extent the Company is required to prepare and submit a Depreciation Study, a Class Cost of Service Study, Minimum Filing Requirements, or other study or report, the costs associated with those mandates should not be shared and should be fully recoverable from the customers. Similarly, costs associated

1 Company to prepare, submit and process its rate case. As I explained in my direct testimony<sup>32</sup>, MAWC does not retain in-house resources necessary to fully support a rate 2 3 case. MAWC uses the Service Company to support the preparation and presentation of 4 many aspects of its rate case, including everything from testimony, schedules and 5 workpapers, to discovery and hearings and all the way through briefing until a final order 6 is issued by the Commission. Because rate cases are somewhat cyclical, the Service 7 Company employs several persons that work on rate cases in multiple states. By doing 8 this, individual operating companies like MAWC avoid the need to hire full-time 9 employees to process rate filings, which would be a more costly alternative and would 10 increase the level of O&M expense embedded into the Company's revenue requirement in 11 this case. Service Company is providing quality service to MAWC at a cost that is less 12 than it would be if MAWC had to hire full-time employees to perform that work. Also 13 Service Company costs have been demonstrated through the analysis and report of 14 Company witness Baryenbruch to be far less than the cost of outside resources that MAWC 15 might retain instead of using Service Company employees for rate case support services. 16 Consequently, MAWC should not be penalized for rate case related services being charged 17 to rate case expense by the Service Company and those costs should be fully recovered in 18 rates.

19

#### XIII. AFFILIATE TRANSACTIONS

Q. What recommendations does OPC witness Marke make about affiliate transactions?
A. OPC witness Marke recommends that the Commission order MAWC to create a cost allocation manual ("CAM") for Commission approval within six months of the date of its

<sup>&</sup>lt;sup>32</sup> LaGrand DT, p. 36

1		Report and Order in this rate case. Additionally, he asks the Commission to provide further
2		guidance to stakeholders in Case No. AW-2018-0394. <sup>33</sup>
3	Q.	Is MAWC currently required to provide a CAM to the Commission?
4	A.	As part of the Stipulation and Agreement in Case No. WR-2007-0216, the Company agreed
5		to continue providing a CAM by March 16th of each year.
6	Q.	Has the Company provided the CAM as required?
7	A.	Yes.
8	Q.	Is there a need for MAWC to create a new cost allocation manual?
9	A.	No, there is no need. The Service Company's allocation manual is a set of criteria,
10		guidelines and procedures for the Service Company cost allocations to MAWC and its
11		affiliates. <sup>34</sup> The costs of support services, including wages, employee benefits, professional
12		services, and other expenses, are based on, or are an allocation of, actual costs incurred.
13		MAWC affiliate transactions have been scrutinized in all of its rate cases, including this
14		one.
15	Q.	Is there currently an open case that considers changes to the Commission's affiliate
16		rules?
17	A.	Yes, Case No. AW-2018-0394 is currently open and will address changes to the affiliate
18		rules. MAWC is a participant in that case, and that is the appropriate venue to determine

 <sup>&</sup>lt;sup>33</sup> Marke DT, p. 19
 <sup>34</sup> The 2020 allocation manual was provided to OPC in response to data request 1111. The 2019 allocation manual was provided to OPC in response to data request 1002, and is available on EFIS. Allocation manuals from 2007 through 2019 are available on EFIS.

1		if the affiliate rules should be expanded to include water and sewer companies.
2		XIV. CREDIT CARD FEES
3	Q.	In its direct case, the Company proposed the inclusion of credit card fees in the overall
4		cost of service. Did Staff address credit card fees in their testimony?
5	A.	Yes, Staff witness Kim Bolin recommended that \$706,464 be included in the revenue
6		requirement to account for credit card fees that are incurred when the customer uses a credit
7		card to pay their bill.
8	Q.	Did Staff make any other recommendations regarding credit card fees?
9	A.	Yes. Staff recommends that MAWC track performance, savings to customers, provide
10		additional reporting, and provide the customer communication plan about this change.
11	Q.	Does the Company agree with these recommendations?
12	A.	Generally, yes. The Company accepts Staff's amount of credit card fees in the cost of
13		service. Additionally, the Company will work with Staff to determine the appropriate
14		reporting metrics and customer communication plan.
15		XV. PROPERTY TAXES
16	Q.	Did any parties address the Company's proposed property tax tracker?
17	A.	Yes. MIEC witness Greg Meyer recommends that the property tax tracker be denied.
18	Q.	Mr. Meyer referenced the Company's property tax AAO (Case No. WU-2017-0351)
19		as evidence that a property tax tracker is inappropriate. Did Mr. Meyer characterize
20		that case accurately?
21	A.	Not completely. That case revolved around specific changes to the property tax assessment

methodologies by St. Louis and Platte Counties. The Company was not seeking to defer
 overall property taxes.

### 3 Q. What is the typical reason for property tax increases?

A. Usually, the increased property taxes are from additional capital investments made by the
utilities. Newer plant is assessed at a much higher rate than older plant, so in a period of
increased capital investments, the tax obligations can increase substantially.

#### 7 Q. How have property taxes been treated by Staff and MIEC in this case?

- 8 A. Both parties have included the property tax paid in December 2019 in their revenue
- 9 requirement, which only includes plant through 2018. Property tax will be updated in the
- 10 true up to reflect the taxes paid in December 2020, which will include plant through 2019.

# 11 Q. If the Company won't have to pay property tax on plant through 2020 until December

- 12 **2021**, will there be an impact in 2021?
- A. Yes. The Company does not keep its books on a cash basis. The estimated 2021 tax
  expense will be accrued starting in January 2021.

#### 15 Q. What impact will that have for the Company's financial status?

- 16 A. The increases in property tax expense each year are significant. Over the last three years,
- 17 the Company's average property tax expense increase has been nearly \$3 million annually.

#### 18 Q. Is property tax different than other expenses?

A. Yes, in two ways. First, property taxes, along with depreciation expense, are a result of
 capital investment made to replace aging infrastructure. The replacement of aging
 infrastructure should be encouraged by the Commission, and expenses directly related to

1		infrastructure investments should be considered differently. By setting a reasonable level
2		of property taxes in this case, and allowing a tracker to capture deviations from that level,
3		either due to additional investments, tax rate changes, or assessment methodology changes,
4		the Commission would reinforce the overall goal of encouraging utilities to continue
5		making the significant investments needed in Missouri. Second, property taxes should be
6		a pass through. The Company collects a level of property tax in rates, and then pays a
7		higher level to the taxing authorities each year, with an ever-increasing gap between what
8		is included in rates and the payment actually made. The Company has no control over tax
9		rates or other aspects of the development of the tax paid. The current treatment of property
10		taxes is one more way in which MAWC's opportunity to earn its authorized rate of return
11		is diminished from the day new rates go into effect.
10		VVI OTHED ITEMS
12		XVI. OTHER ITEMS
12 13	Q.	<u>XVI. OTHER ITEMS</u> Are there any other items to address in your testimony?
	<b>Q.</b> A.	
13		Are there any other items to address in your testimony?
13 14		Are there any other items to address in your testimony? Yes, there are a few. I'd like to address MIEC's concerns with the income tax gross up
13 14 15		Are there any other items to address in your testimony? Yes, there are a few. I'd like to address MIEC's concerns with the income tax gross up factor, Staff's position as to the Company's taxable CIAC tariff, and Staff comments
13 14 15		Are there any other items to address in your testimony? Yes, there are a few. I'd like to address MIEC's concerns with the income tax gross up factor, Staff's position as to the Company's taxable CIAC tariff, and Staff comments
13 14 15 16	A.	Are there any other items to address in your testimony? Yes, there are a few. I'd like to address MIEC's concerns with the income tax gross up factor, Staff's position as to the Company's taxable CIAC tariff, and Staff comments concerning the Company's general ledger.
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>	A.	Are there any other items to address in your testimony? Yes, there are a few. I'd like to address MIEC's concerns with the income tax gross up factor, Staff's position as to the Company's taxable CIAC tariff, and Staff comments concerning the Company's general ledger. MIEC opposes the Company's income tax gross up factor because it includes
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	А. <b>Q</b> .	Are there any other items to address in your testimony? Yes, there are a few. I'd like to address MIEC's concerns with the income tax gross up factor, Staff's position as to the Company's taxable CIAC tariff, and Staff comments concerning the Company's general ledger. MIEC opposes the Company's income tax gross up factor because it includes provisions for the PSC assessment and uncollectibles. <sup>35</sup> Is this correct?

<sup>&</sup>lt;sup>35</sup> Meyer DT, p. 41-42

1	Q.	Staff recommends the Company's tariff Sheet No. R65 be discontinued because the
2		Company has not deferred any taxable CIAC. <sup>36</sup> Do you agree with this
3		recommendation?
4	A.	No. CIAC was made taxable by the Tax Cut and Jobs Act of 2017, and that law is still in
5		place. The Company has paid the taxes on CIAC, and those amounts are deferred, as part
6		of the Company's deferred taxes.
7	Q.	Staff raised concern about some aspects of the Company's general ledger. Would you
8		like to respond to those concerns?
9	A.	Yes. Staff discussed the challenges of matching invoices against the general ledger detail <sup>37</sup> ,
10		and the Company understands the challenge. At the conclusion of this case, the Company
11		would welcome an opportunity to review both this and our general ledger mapping with
12		Staff. These discussions would likely result in process improvements for the Company's
13		next rate case that would benefit both Staff and the Company.
14	Q.	Does this conclude your revenue requirement rebuttal testimony?

15 A. Yes, it does.

 <sup>&</sup>lt;sup>36</sup> COS Report, p. 74-75
 <sup>37</sup> COS Report, p. 62, 64-65

#### Missouri American Water Overall Revenue Requirement WR-2020-0344

	Base Year Ended		Update Period	Pro Forma	Future Test Year
Rate Base	12/31/19	Adjustments	6/30/20	Adjustments	5/31/22
Utility Plant in Service	2,759,562,072	99,695,337	2,859,257,409	315,848,900	3,175,106,309
Accumulated Provision for Depreciation	(564,030,204)	1,476,929	(562,553,275)	(38,734,198)	(601,287,473)
Accumulated Amortization	0	0	0	0	0
Utility Plant Acquisition Adjustments	0	0	0	0	0
Net Utility Plant	2,195,531,868	101,172,266	2,296,704,134	277,114,702	2,573,818,836
Less:					
Customer Advances	6,660,582	(2,702,878)	3,957,704	2,822,642	6,780,346
Contributions in Aid of Construction	275,024,145	2,864,253	277,888,398	1,896,488	279,784,886
Accumulated Deferred ITC (3%)	0	0	0	0	0
Deferred Income Taxes	442,883,653	10,787,452	453,671,105	27,297,323	480,968,428
Pension/OPEB Tracker	8,443,552	1,653,667	10,097,219	2,149,508	12,246,727
Subtotal Reductions	733,011,932	12,602,494	745,614,426	34,165,961	779,780,387
Add:					
Cash Working Capital	(1,359,600)	(2,463,700)	(3,823,300)	(721,200)	(4,544,500)
Materials and Supplies	5,705,263	365,305	6,070,568	96,721	6,167,289
Prepayments	0	0	0	0	0
OPEB's Contributed to External Fund	0	0	0	0	0
Pension Asset	4,489,975	1,648,950	6,138,925	2,058,782	8,197,707
Regulatory Deferrals	11,559,863	1,348,512	12,908,375	6,099,873	19,008,248
Tank Painting Tracker	247,635	(82,545)	165,090	(164,031)	1,059
Subtotal Additions	20,643,136	816,522	21,459,658	7,370,145	28,829,803
Total Original Cost Rate Base	1,483,163,072	89,386,294	1,572,549,366	250,318,886	1,822,868,252

	Base Year Ended		Update Period	Pro Forma	Future Test Year
Cost of Capital	12/31/19	Adjustments	6/30/20	Adjustments	5/31/22
Class of Capital					
Short Term Debt	30,067,983	(21,631,185)	8,436,798	(8,436,798)	0
Long Term Debt	697,951,910	109,014,925	806,966,835	67,491,674	874,458,509
Preferred Stock	233,417	711	234,128	(234,128)	0
Common Equity	778,764,694	45,344,159	824,108,853	162,259,207	986,368,060
Total	1,507,018,005	132,728,609	1,639,746,614	221,079,954	1,860,826,568
Cost of Capital					
Short Term Debt	1.85%		0.26%		1.37%
Long Term Debt	5.07%		4.86%		4.70%
Preferred Stock	10.44%		10.41%		0.00%
Common Equity	10.50%		10.50%		10.50%
Weighted Cost of Capital					
Short Term Debt	0.04%		0.00%		0.00%
Long Term Debt	2.35%		2.39%		2.21%
Preferred Stock	0.00%		0.00%		0.00%
Common Equity	5.43%		5.28%		5.57%
Total After Tax Cost of Capital	7.82%		7.67%		7.78%
Tax Gross up Factor	1.32606		1.32606		1.32606
Pre-Tax Cost of Capital	9.59%		9.39%		9.60%

#### Missouri American Water Overall Revenue Requirement WR-2020-0344

	Base Year Ended		Update Period	Pro Forma	Future Test Year
Operating Expenses	12/31/19	Adjustments	6/30/20	Adjustments	5/31/22
Purchased Water	1,000,137	164,116	1,164,253	251,276	1,415,529
Fuel and Power	11,062,562	485,450	11,548,012	(43,787)	11,504,225
Chemicals	9,397,747	(295,107)	9,102,640	370,387	9,473,027
Waste Disposal	2,482,895	192,284	2,675,179	189,305	2,864,484
Labor	31,001,296	3,737,339	34,738,635	1,067,996	35,806,631
Pensions	2,767,661	(2,286,059)	481,602	2,022	483,624
OPEB	(2,359,906)	(1,196,886)	(3,556,792)	(35,878)	(3,592,670)
Group Insurance	6,147,663	586,398	6,734,061	196,086	6,930,147
401K	784,204	148,443	932,647	(37,414)	895,233
DCP	813,565	165,075	978,640	(7,564)	971,076
ESPP	170,435	11,222	181,657	618	182,275
VEBA	144,300	(631)	143,669	1,009	144,678
Other Benefits	761,178	(214,708)	546,470	260,505	806,975
Support Services	32,578,064	3,799,731	36,377,795	2,630,045	39,007,840
Contracted services	3,966,723	223,395	4,190,118	198,800	4,388,918
Building Maintenance and Services	1,066,078	1,950	1,068,028	48,657	1,116,685
Telecommunication expenses	1,197,099	(7,111)	1,189,988	63,921	1,253,909
Postage, printing and stationary	29,459	2,384	31,843	(928)	30,915
Office supplies and services	1,279,611	45	1,279,656	60,714	1,340,370
Employee related expense travel & entertainmen	419,932	360,932	780,864	37,082	817,946
Rents	335,990	157,281	493,271	12,819	506,090
Transportation	1,410,299	776,590	2,186,889	24,384	2,211,273
Miscellaneous	3,199,602	(42,058)	3,157,544	100,998	3,258,542
Uncollectible accounts expense	1,844,114	1,237,469	3,081,583	1,200	3,082,783
Customer Accounting	3,795,546	(2,408,270)	1,387,276	(57 <i>,</i> 945)	1,329,331
Regulatory Expense	416,440	166,552	582,992	0	582,992
Insurance Other than Group	4,974,749	974,415	5,949,164	889,369	6,838,533
Maintenance supplies and services	7,957,017	179,068	8,136,085	(365,071)	7,771,014
Total Operations and Maintenance	128,644,460	6,919,309	135,563,769	5,858,606	141,422,375
Depreciation	47,455,673	16,310,489	63,766,162	8,597,258	72,363,420
Amortization	1,403,365	1,240,917	2,644,282	1,112,445	3,756,727
Total Depreciation and Amortization	48,859,038	17,551,406	66,410,444	9,709,703	76,120,147
Property Taxes	25,619,522	2,962,634	28,582,156	2,363,583	30,945,739
Payroll Taxes	2,420,153	218,717	2,638,870	78,336	2,717,206
PSC Fees	2,486,069	(118,889)	2,367,180	91,793	2,458,973
Other General Taxes	(125,430)	(110,005)	(125,430)	0	(125,430)
Total Taxes Other Than Income Taxes	30,400,314	3,062,462	33,462,776	2,533,712	35,996,488
Total Expenses	207,903,812	27,533,177	235,436,989	18,102,021	253,539,010

#### Missouri American Water Overall Revenue Requirement WR-2020-0344

	Base Year Ended		Update Period	Pro Forma	Future Test Year
Utility Operating Income	12/31/19	Adjustments	6/30/20	Adjustments	5/31/22
Operating Revenues	324,614,681	(11,073,834)	313,540,847	122,011	313,662,858
Operating Expenses					
Operating and Maintenance	128,644,460	6,919,308	135,563,768	5,858,607	141,422,375
Depreciation Expense	47,455,673	16,310,489	63,766,162	8,597,258	72,363,420
Amortization Expense	1,403,365	1,240,917	2,644,282	1,112,445	3,756,727
Taxes other Than Income Taxes					
Property Taxes	25,619,522	2,962,634	28,582,156	2,363,583	30,945,739
Payroll Taxes	2,420,153	218,717	2,638,870	78,336	2,717,206
PSC Fees	2,486,069	(118,889)	2,367,180	91,793	2,458,973
Other General Taxes	(125,430)	0	(125,430)	0	(125,430)
Utility Operating Income Before Income Taxes	116,710,869	(38,607,010)	78,103,859	(17,980,011)	60,123,848
Income Taxes					
Current Federal Income Tax	(10,474,506)	10,521,792	47,286	(8,956,176)	(8,908,890)
Current State Income Tax	67,259	(58,866)	8,393	(1,551,830)	(1,543,437)
Deferred Income Taxes	31,764,307	(27,486,494)	4,277,813	5,656,720	9,934,533
Amortization of Investment Tax Credit	(103,620)	0	(103,620)	0	(103,620)
Utility Operating Income	95,457,429	(21,583,442)	73,873,987	(13,128,725)	60,745,262

	Base Year Ended		Update Period	Pro Forma	Future Test Year
	12/31/19	Adjustments	6/30/20	Adjustments	5/31/22
Original Cost Rate Base	1,483,163,072	89,386,294	1,572,549,366	250,318,886	1,822,868,252
Rate of Return	7.82%		7.67%		7.78%
Required Operating Income	115,983,352	4,631,184	120,614,536	21,204,614	141,819,150
Operating Income at Present Rates	95,457,429	(21,583,442)	73,873,987	(13,128,725)	60,745,262
Operating Income Deficiency	20,525,923	26,214,626	46,740,549	34,333,339	81,073,888
Gross Revenue Tax Conversion Factor	1.3261		1.3261		1.3261
Revenue Deficiency	27,218,606	34,762,167	61,980,773	45,528,067	107,508,840
Pro-Forma Revenue at Present Rates	324,614,681	(11,073,834)	313,540,847	122,011	313,662,858
Total Revenue Requirement	351,833,287	23,688,333	375,521,620	45,650,078	421,171,698

# Comparison of MAWC and Staff Revenue Requirements WR-2020-0344

	MAWC		Staff
Rate Base	6/30/20	Differences	6/30/20
Utility Plant in Service	2,859,257,409	6	2,859,257,415
Accumulated Provision for Depreciation	(562,553,275)	21,004	(562,532,271)
Accumulated Amortization	0	0	
Utility Plant Acquisition Adjustments	0	0	
Net Utility Plant	2,296,704,134	21,010	2,296,725,144
Less:			
Customer Advances	3,957,704	2	3,957,706
Contributions in Aid of Construction	277,888,398	0	277,888,398
Accumulated Deferred ITC (3%)	0	0	0
Deferred Income Taxes	453,671,105	145,577,667	599,248,772
Pension/OPEB Tracker	10,097,219	(160,339)	9,936,880
Subtotal Reductions	745,614,426	145,417,330	891,031,756
Add:			
Cash Working Capital	(3,823,300)	(7,930,258)	(11,753,558)
Materials and Supplies	6,070,568	0	6,070,568
Prepayments	0	2,830,152	2,830,152
OPEB's Contributed to External Fund	0	0	0
Pension Asset	6,138,925	0	6,138,925
Regulatory Deferrals	12,908,375	(12,908,375)	0
Tank Painting Tracker	165,090	(165,090)	0
Subtotal Additions	21,459,658	(18,173,571)	3,286,087
Total Original Cost Rate Base	1,572,549,366	(163,569,891)	1,408,979,475

	MAWC		Staff
Cost of Capital	6/30/20	Differences	6/30/20
Class of Capital			
Short Term Debt	8,436,798	(8,436,798)	0
Long Term Debt	806,966,835	8,850,072,190	9,657,039,025
Preferred Stock	234,128	5,291,541	5,525,669
Common Equity	824,108,853	5,513,788,694	6,337,897,547
Total	1,639,746,614	14,360,715,627	16,000,462,241
Cost of Capital			
Short Term Debt	0.26%		0.00%
Long Term Debt	4.86%		4.21%
Preferred Stock	10.41%		8.65%
Common Equity	10.50%		9.55%
Weighted Cost of Capital			
Short Term Debt	0.00%		0.00%
Long Term Debt	2.39%		2.54%
Preferred Stock	0.00%		0.00%
Common Equity	5.28%		3.78%
Total After Tax Cost of Capital	7.67%		6.33%
Tax Gross up Factor	1.32606		1.32313
Pre-Tax Cost of Capital	9.39%		7.55%

#### Schedule BWL-2

### Missouri American Water Comparison of MAWC and Staff Revenue Requirements WR-2020-0344

	MAWC		Staff
Operating Expenses	6/30/20	Differences	6/30/20
Purchased Water	1,164,253	(93,891)	1,070,362
Fuel and Power	11,548,012	(744,999)	10,803,013
Chemicals	9,102,640	528,158	9,630,798
Waste Disposal	2,675,179	122,736	2,797,915
Labor	34,738,635	(9,112,067)	25,626,568
Pensions	481,602	1,040,454	1,522,056
OPEB	(3,556,792)	(2,479,926)	(6,036,718)
Group Insurance	6,734,061	(3,455,908)	3,278,153
401K	932,647	(173,363)	759,284
DCP	978,640	(253,841)	724,799
ESPP	181,657	(11,222)	170,435
VEBA	143,669	(2,646)	141,023
Other Benefits	546,470	214,708	761,178
Support Services	36,377,795	(12,173,585)	24,204,210
Contracted services	4,190,118	1,616,256	5,806,374
Building Maintenance and Services	1,068,028	(10,306)	1,057,722
Telecommunication expenses	1,189,988	7,111	1,197,099
Postage, printing and stationary	31,843	(2,384)	29,459
Office supplies and services	1,279,656	132,197	1,411,853
Employee related expense travel & entertainmen	780,864	(204,859)	576,005
Rents	493,271	127,999	621,270
Transportation	2,186,889	(846,495)	1,340,394
Miscellaneous	3,157,544	(931,318)	2,226,226
Uncollectible accounts expense	3,081,583	(105,529)	2,976,054
Customer Accounting	1,387,276	3,141,496	4,528,772
Regulatory Expense	582,992	(526,335)	56,657
Insurance Other than Group	5,949,164	(130,134)	5,819,030
Maintenance supplies and services	8,136,085	(1,357,665)	6,778,420
Total Operations and Maintenance	135,563,769	(25,685,358)	109,878,411
Depreciation	63,766,162	(8,500,326)	55,265,836
Amortization	2,644,282	(1,346,492)	1,297,790
Total Depreciation and Amortization	66,410,444	(9,846,818)	56,563,626
Property Taxes	28,582,156	(3,160,386)	25,421,770
Payroll Taxes	2,638,870	(360,382)	2,278,488
PSC Fees	2,367,180	(237,438)	2,129,742
Other General Taxes	(125,430)	0	(125,430)
Total Taxes Other Than Income Taxes	33,462,776	(3,758,206)	29,704,570
Total Expenses	235,436,989	(39,290,382)	196,146,607

# Comparison of MAWC and Staff Revenue Requirements WR-2020-0344

	MAWC		Staff
Utility Operating Income	6/30/20	Differences	6/30/20
Operating Revenues	313,540,847	8,671,095	322,211,942
Operating Expenses			
Operating and Maintenance	135,563,769	(25,685,358)	109,878,411
Depreciation Expense	63,766,162	(8,500,326)	55,265,836
Amortization Expense	2,644,282	(1,346,492)	1,297,790
Taxes other Than Income Taxes			
Property Taxes	28,582,156	(3,160,386)	25,421,770
Payroll Taxes	2,638,870	(360,382)	2,278,488
PSC Fees	2,367,180	(237,438)	2,129,742
Other General Taxes	(125,430)	0	(125,430)
Utility Operating Income Before Income Taxes	78,103,858	47,961,477	126,065,335
ouncy operating meanic before meanic raxes	70,100,000	47,501,477	120,003,333
Income Taxes			
Current Federal Income Tax	55,679	28,930,095	28,985,774
Deferred Income Taxes	4,277,813	(26,336,160)	(22,058,347)
Amortization of Investment Tax Credit	(103,620)	0	(103,620)
	( , ,		
Utility Operating Income	73,873,986	45,367,542	119,241,528

	MAWC		Staff
Revenue Requirement	6/30/20	Differences	6/30/20
Original Cost Rate Base	1,572,549,366	(163,569,891)	1,408,979,475
Rate of Return	7.67%		6.33%
Required Operating Income	120,614,536	(31,468,405)	89,146,131
Operating Income at Present Rates	73,873,986	45,367,542	119,241,528
Operating Income Deficiency	46,740,550	(76,835,947)	(30,095,396)
Gross Revenue Tax Conversion Factor	1.3261		1.3231
Revenue Deficiency	61,980,774	(101,800,896)	(39,820,122)
Pro-Forma Revenue at Present Rates	313,540,847	8,671,095	322,211,942
Total Revenue Requirement	375,521,621	(93,129,801)	282,391,820
True Up Allowance *	25,000,000	(5,103,431)	19,896,569
Pro-Forma Revenue Requirement	400,521,621	(98,233,232)	302,288,389

\* True up allowances are estimates at this time

#### AFUDC Rate Calculations

Schedule BWL-3

	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Total Assets	2,024,384,364	2,047,433,224	2,059,453,345	2,069,556,496	2,080,367,886	2,098,114,140	2,158,544,453	2,134,997,545	2,152,669,128	2,165,949,816	2,165,419,592	2,178,192,217	2,160,591,537
Total Capital and Liabilities	2,012,749,375	2,048,123,565	2,058,332,678	2,071,010,478	2,079,123,240	2,093,373,194	2,146,074,212	2,112,593,702	2,120,318,156	2,138,272,886	2,132,257,628	2,142,149,514	2,143,748,623
Net Income	11,634,989	(690,341)	1,120,667	(1,453,982)	1,244,646	4,740,946	12,470,241	22,403,843	32,350,972	27,676,930	33,161,964	36,042,704	16,842,914
Long Term Debt													
Tota Long-Term Debt	586,549,273	586,555,426	586,561,579	586,567,733	586,573,886	586,580,039	586,586,192	586,592,346	631,574,199	631,580,397	631,586,618	631,592,839	631,599,060
18661000 Reg Asset - Unamortized Debt Exp	4,282,029	4,249,350	4,216,754	4,183,952	4,151,273	4,118,595	4,085,916	4,053,238	4,020,559	3,987,881	3,955,202	3,922,524	3,889,845
18661500 Reg Asset - Unamortized Debt Exp Interco	3,914,940	3,894,337	3,873,734	3,852,670	3,832,070	3,811,470	3,790,870	3,770,270	4,216,394	4,196,539	4,174,637	4,152,735	4,130,832
Total Net Long Term Debt	578,352,303	578,411,738	578,471,091	578,531,110	578,590,542	578,649,974	578,709,406	578,768,838	623,337,246	623,395,978	623,456,779	623,517,581	623,578,382
Preferred Stock													
Total Redeemable Preferred Stock at Redemption	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	250,000	250,000
Total Current Portion Redeemable Preferred Stock	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
18662000 Reg Asset - Unamortized Preferred Stock Exp	19,426	19,307	19,189	19,070	18,952	18,834	18,715	18,597	18,478	18,360	18,241	18,123	18,004
Total Net Preferred Stock	730,574	730,693	730,811	730,930	731,048	731,166	731,285	731,403	731,522	731,640	731,759	481,877	481,996
Total Equity	634,138,953	645,773,941	645,788,476	645,827,599	645,827,599	645,855,588	645,940,946	645,940,946	645,966,152	646,041,431	646,041,431	646,064,127	666,140,234
Short Term Debt	0	23,042,909	37,818,060	51,192,057	63,823,883	68,854,950	97,316,908	60,746,712	18,291,107	21,327,003	17,702,882	36,779,500	47,144,759
Total	1,224,856,819	1,247,268,941	1,263,929,106	1,274,827,714	1,290,217,719	1,298,832,625	1,335,168,786	1,308,591,742	1,320,676,998	1,319,172,982	1,321,094,816	1,342,885,789	1,354,188,284
	, ,,		, . , . ,							,, ,			
Ratio of Current Portion of Preferred Stock													
Long Term Portion	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	50.0%	50.0%
Current Portion	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	50.0%	50.0%
YTD Financing Costs													
81010000 Interest Long Term Debt	2,331,321	192,094	384,188	576,281	768,375	960,469	1,152,563	1,344,656	1,536,750	1,728,844	1,920,938	2,113,031	2,305,125
81015000 Interest Long Term Debt Intercompany	27,260,671	2,317,904	4,635,808	6,953,713	9,271,617	11,589,521	13,907,425	16,225,330	18,653,484	21,128,888	23,604,292	26,079,696	28,555,101
81016000 Interest expense-LTD debt discount amort inside	66,276	6,153	12,307	18,460	24,613	30,766	36,920	43,073	49,226	55,425	61,646	67,866	74,087
81020000 Dividends Declared P/S w/ Mand Redemptn Requiremts	87,975	5,738	11,284	17,213	22,950	28,688	34,425	40,163	45,900	51,638	57,375	61,200	65,025
Total: Interest on short-term debt	400,280	28,745	75,750	160,371	274,706	413,956	575,751	773,275	854,324	891,598	936,095	982,449	1,049,208
Annualized Financing Costs													
81010000 Interest Long Term Debt	2,331,321	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125	2,305,125
81015000 Interest Long Term Debt Intercompany	27,260,671	27,814,851	27,814,851	27,814,851	27,814,851	27,814,851	27,814,851	27,814,851	27,980,226	28,171,851	28,325,151	28,450,578	28,555,101
81016000 Interest expense-LTD debt discount amort inside	66,276	73,839	73,839	73,839	73,839	73,839	73,839	73,839	73,839	73,900	73,975	74,036	74,087
81020000 Dividends Declared P/S w/ Mand Redemptn Requiremts	87,975	68,850	67,703	68,850	68,850	68,850	68,850	68,850	68,850	68,850	68,850	66,764	65,025
Total: Interest on short-term debt	400,280	344,943	454,498	641,483	824,118	993,493	1,151,502	1,325,614	1,281,487	1,188,797	1,123,314	1,071,763	1,049,208
Overall Rate													
Long Term Debt	5.1339%	5.2237%	5.2230%	5.2226%	5.2220%	5.2215%	5.2210%	5.2204%	4.8740%	4.9042%	4.9283%	4.9479%	4.9641%
Short Term Debt	0.0000%	1.5799%	1.2534%	1.2918%	1.3221%	1.4710%	1.2038%	2.2111%	7.0377%	5.6175%	6.3870%	2.9852%	2.2828%
Equity	9.7500%	9.7500%	9.7500%	9.7500%	9.7500%	9.7500%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%
Ratio													
Long Term Debt	47.2776%	46.4143%	45.8072%	45.4203%	44.8832%	44.5900%	43.3810%	44.2666%	47.2362%	47.2945%	47.2303%	46.4498%	46.0666%
Short Term Debt	0.0000%	1.8660%	3.0104%	4.0337%	4.9647%	5.3191%	7.3061%	4.6598%	1.4025%	1.6343%	1.3576%	2.7561%	3.4985%
Equity	52.7224%	51.7197%	51.1824%	50.5459%	50.1522%	50.0909%	49.3130%	51.0736%	51.3613%	51.0713%	51.4122%	50.7941%	50.4349%
Weighted Cost													
Long Term Debt	2.4272%	2.4245%	2.3925%	2.3721%	2.3438%	2.3283%	2.2649%	2.3109%	2.3023%	2.3194%	2.3277%	2.2983%	2.2868%
Short Term Debt	0.0000%	0.0295%	0.0377%	0.0521%	0.0656%	0.0782%	0.0880%	0.1030%	0.0987%	0.0918%	0.0867%	0.0823%	0.0799%
Equity	5.1404%	5.0427%	4.9903%	4.9282%	4.8898%	4.8839%	4.9313%	5.1074%	5.1361%	5.1071%	5.1412%	5.0794%	5.0435%
Monthly AFUDC Rate	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19
AFUDC Debt	0.2020%	0.2050%	0.2030%	0.2020%	0.2010%	0.2010%	0.1960%	0.2010%	0.2000%	0.2010%	0.2010%	0.1980%	0.1970%
AFUDC Equity	0.4280%	0.4200%	0.4160%	0.4110%	0.4070%	0.4070%	0.4110%	0.4260%	0.4280%	0.4260%	0.4280%	0.4230%	0.4200%
	0.120070	0.1200/0	0.120070	0.1110/0	0.107070	0.107070	0.1110/0	0.120070	0.120070	0.120070	0.120070	0.120070	0.1200/0

Note: AFUDC rate calculation uses financial statement data from prior month

#### AFUDC Rate Calculations

Schedule BWL-3

Time Ansem         20.807.170         20.807.071         20.807.070         20.707.000         20.707.000         20.807.		1 40	5-1-40	11 10	A	Mar. 40	hur 10	1.1.10	Aug 40	C 40	0.1.40	Nov. 40	D 40	1 20
Name Activity         2,02,000,026         2,02,000,026         2,02,000,026         2,000,00         2,000,00 <td>Total Assets</td> <td>Jan-19</td> <td>Feb-19</td> <td>Mar-19</td> <td>Apr-19</td> <td>May-19</td> <td>Jun-19</td> <td>Jul-19</td> <td>Aug-19</td> <td>Sep-19</td> <td>Oct-19</td> <td>Nov-19</td> <td>Dec-19</td> <td>Jan-20</td>	Total Assets	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20
Set Resone         JAKAM         SALAM         SALAM        SALAM         SALAM														
Status         Products         <						1	1 11 11 11							2,080,995
Status         Products         <	Long Torm Dobt													
Biscibio Apace Humenberleher is         Biscibio Apace		631 605 281	631 611 502	631 617 722	631 623 9/3	706 233 325	706 240 649	706 247 972	706 255 295	706 262 618	706 269 941	706 277 265	706 284 588	706 201 011
19602500 Process connectance Deck Dig Intern         4.000 Process ProcestProcess Process Process Process Process Process Proc														
Tabe Index Sprem Debt         623,69,369         633,69,367         633,69,367         633,69,367         643,61,324         697,87,368         693,87,578         697,87,368         693,87,578         697,87,378         777,87,87,377         777,771,773	· ·													
Space International Professional P														698,217,589
Space International Professional P	Brafarrad Stack													
Table Convertion         Status         <		250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	0	0	0
1360000 Register - Lumentizer Peterrer Stands Log         13.88         13.79         13.68         13.79         13.68         13.79         13.68         15.79         13.638         15.030         15.031         15.031         15.175         13.638         15.031														
Total Net Preferred Stack         442,114         442,236         442,245         442,469         442,266         442,265         442,465         441,445         623,240,47         323,259         323,477         323,585           Total Laphy         662,040,055         612,714,267         612,014,061         662,014,061         662,022,346         612,022,346         662,002,356         663,114,645         663,1146         663,114,645         663,114,645         663,114,645         663,114,645         663,114,645         663,114,645         663,114,645         663,114,645         663,114,645         663,114,645         663,114,														
Total carry         G82,290,255         G82,75,287         G82,75,287         G82,76,205         G83,762,247         G83,762,247 <thg83,774< th="">         G83,762,778         G</thg83,774<>														
Start Term Ibelt         76,014,07         88,899,392         102,06,268         113,997,713         48,06,111         64,342,898         68,386,320         64,454,312         65,957,85         72,029,321         73,03,071         83,00,098         81,272,571           Total         13355,21,298         144,103,759         141,034,759         143,155,330         1451,933,381         1455,945,701         147,245,718         140,139,355         153,551,178		402,114	402,233	402,331	482,405	482,388	482,700	402,025	482,545	483,002	485,180	233,235	233,417	233,333
Total         1,48,52;1,98         1,40,192,79         1,41,193,79         1,425,45,89         1,451,943,79         1,472,151,79         1,425,953,70         1,511,513         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,425,943,70         1,515,51         1,515,51         1,50	Total Equity	682,960,255	682,753,287	682,934,061	682,934,061	682,978,105	683,022,254	683,022,254	683,068,558	683,114,665	683,114,665	683,156,191	758,009,924	778,764,692
Alea of Larent Portion         S0.0%	Short Term Debt	76,014,067	88,899,392	102,106,268	113,987,713	48,616,115	64,342,898	68,886,320	68,445,432	65,935,745	72,029,123	73,503,637	36,360,098	83,274,572
Long Term Partian         500% <td>Total</td> <td>1,386,521,963</td> <td>1,401,252,785</td> <td>1,411,034,750</td> <td>1,426,566,855</td> <td>1,438,145,383</td> <td>1,451,943,583</td> <td>1,465,081,814</td> <td>1,475,145,772</td> <td>1,472,758,184</td> <td>1,485,968,611</td> <td>1,491,593,555</td> <td>1,513,511,728</td> <td>1,562,571,384</td>	Total	1,386,521,963	1,401,252,785	1,411,034,750	1,426,566,855	1,438,145,383	1,451,943,583	1,465,081,814	1,475,145,772	1,472,758,184	1,485,968,611	1,491,593,555	1,513,511,728	1,562,571,384
Long Term Partian         500% <td>Patia of Current Portion of Professod Stock</td> <td></td>	Patia of Current Portion of Professod Stock													
Currer Portion         50.%		E0.0%	0.0%	0.0%	0.0%									
American Costs         Statistican form Debt         189,815         379,630         569,445         759,259         949,074         1.138,889         1.228,704         1.578,334         2.897,106         2.287,2703         2.287,2703         2.287,2703         1.278,274         1.278,274         1.279,2748         2.287,2703         1.278,274         1.279,2748         2.287,2703         1.278,2749         1.278,276         1.279,2738         2.248,2703         1.279,2718         2.277,778         2.277,7														
31010000 interest cong Ferm Debt intercompany       2,477,404       4,989,48       399,630       59,445       39,021       1,138,819       1,328,744       1,518,519       1,008,334       1,398,148       2,087,664       2,272,703       2,274,744       4,566,13       9,001,617       1,528,780       1,758,338       2,481,117       2,197,795       2,322,000       1,378,344       1,388,744       1,583,117       2,197,756       2,273,755       83,028       7,235         31020000 interest copenes L1 06bt discount anort inside       3,255       7,355       1,177,51       1,301,67       1,318,419       1,533,077       1,576,247       1,752,148       1,907,669       84,020         Ansatzed Financing Costs         Stort of the debt discount anort inside       2,277,778 <td>Current Portion</td> <td>50.0%</td> <td>100.0%</td> <td>100.0%</td> <td>100.0%</td>	Current Portion	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%	100.0%	100.0%
81015000 interest compart mobel: intercompany       2,475,444       4,455,088       7,476,713       82,224,000       13,258,780       17,993,595       20,728,388       2,448,111       26,197,886       28,832,676       31,769,214       2,774,775         8100000 interest compare Und bet intercompany       3,825       7,395       11,475       15,300       19,125       22,950       26,775       30,600       34,425       38,220       40,163       42,007       1,313         Total: Interest on short-term debt       17,68,57       365,183       599,166       84,2236       1,045,647       1,162,625       1,301,07       1,431,432       1,553,077       1,676,247       1,792,148       1,907,669       84,2236         8100000 interest long term bett intercompany       2,777,778       2,277,778	YTD Financing Costs													
810160000 Interest opense. U10 debt discount amout inside       6,221       12,442       18,663       24,883       31,766       130,089       44,412       53,735       61,058       68,382       77,505       83,028       7,325         81020000 Dividends beciared P/S w/ Mand Redemptin Requiremts       38,257       7,305       11,475       15,300       19,125       22,950       26,775       30,680       34,425       38,250       40,163       42,075       19,0125       22,950       26,775       30,680       34,425       38,250       40,163       42,075       19,0126       42,075       19,0126       19,0126       14,31,432       1,553,077       1,676,247       1,972,148       1,907,669       84,020         Anualized financing Costs       2,077,778       2,217,978 <td< td=""><td>81010000 Interest Long Term Debt</td><td>189,815</td><td>379,630</td><td>569,445</td><td>759,259</td><td>949,074</td><td>1,138,889</td><td>1,328,704</td><td>1,518,519</td><td>1,708,334</td><td>1,898,148</td><td>2,087,963</td><td>2,282,703</td><td>187,436</td></td<>	81010000 Interest Long Term Debt	189,815	379,630	569,445	759,259	949,074	1,138,889	1,328,704	1,518,519	1,708,334	1,898,148	2,087,963	2,282,703	187,436
Bit2D000 Dividends Declared P/S w/ Mand Redemptin Requiremts       3,825       7,395       11,475       15,300       19,125       22,077       30,600       34,423       38,250       40,163       42,075       1,913         Total: Interest on short-term debt       176,857       365,183       599,106       84,2236       1,045,647       1,162,625       1,301,067       1,431,432       1,553,077       1,676,247       1,792,148       1,907,669       84,204         Annualization form the debt       2,277,778       2,277,77	81015000 Interest Long Term Debt Intercompany	2,475,404	4,950,808	7,426,213	9,901,617	12,524,000	15,258,780	17,993,559	20,728,338	23,463,117	26,197,896	28,932,676	31,769,214	2,734,779
Characteristication short-term debt       176,857       365,183       599,106       842,236       1,045,647       1,162,625       1,301,067       1,431,432       1,553,077       1,576,247       1,792,148       1,907,669       84,207         Annualized Financing Cores       2,277,778       2,287,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778       2,277,778	81016000 Interest expense-LTD debt discount amort inside	6,221	12,442	18,663	24,883	31,766	39,089	46,412	53,735	61,058	68,382	75,705	83,028	7,323
Annulated Financing Costs         Status         Annulated Financing Costs           81010000 Interest Long Term Debt         2,277,778         2,277,77	81020000 Dividends Declared P/S w/ Mand Redemptn Requiremts	3,825	7,395	11,475	15,300	19,125	22,950	26,775	30,600	34,425	38,250	40,163	42,075	1,913
3b1000001terest Long Term Debt       2.277,778	Total: Interest on short-term debt	176,857	365,183	599,106	842,236	1,045,647	1,162,625	1,301,067	1,431,432	1,553,077	1,676,247	1,792,148	1,907,669	84,201
3b1000001terest Long Term Debt       2.277,778	Annualized Einancing Costs													
81015000 Interest Long Term Debt Intercompany       29,704,851       29,704,851       29,704,851       29,704,851       29,704,851       30,057,601       30,057,601       30,084,101       31,002,507       31,284,156       31,47,476       31,562,919       31,769,214       32,817,353         81015000 Interest expense-L1D debt discount amort inside       74,650       74,650       74,650       74,650       74,650       74,650       74,650       74,650       74,650       81,411       82,058       81,411       82,058       81,421,42,00       82,058       81,411       82,058       81,421,42,00       82,058       81,421,42,00       82,058       81,411       82,058       81,421,42,00       82,058       81,411       82,058       81,420,00       81,421,42,00       82,058       81,421,42,00       82,058       81,421,42,00       81,421,42,00       81,425,00       43,304       42,005       82,2587       31,092,60       43,304       44,92,00       83,028       83,028       83,028       83,028       83,028       83,028       83,028       83,028       83,028       83,028       83,028       83,028       44,8304       44,8304       48,0304       44,8304       44,8354       44,8354       44,8354       44,8354       44,1281,428       44,83544       44,6384       44,6384		2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 277 778	2 282 703	2 249 228
81016000 Interest expense-ID debt discourt amort inside       74,650       74,650       74,650       74,650       76,238       78,178       79,563       80,603       81,411       82,058       82,2587       83,028       87,277         81020000 Dividends Declared P/S w/ Mand Redemptn Requiremts       45,900       4		, , ,	, , .	, , .	, , -	, , -	, , .	, , -		, , .	, , .	, , -	, . ,	, ., .
81020000 Dividends Declared P/S w/ Mand Redemptin Requiremts       45,900       44,300       45,900       45,														
Total: Interest on short-term debt         2,122,282         2,191,100         2,396,424         2,526,708         2,529,553         2,325,251         2,20,000         2,147,149         2,070,769         2,011,496         1,907,669         1,010,406           Oursell Rate         U </td <td></td>														
Overall Rate           Long Term Debt         5.1420%         5.1414%         5.1410%         5.1405%         4.6463%         4.7129%         4.7597%         4.7947%         4.8219%         4.8594%         4.8893%         5.0349%           Short Term Debt         2.8132%         2.4829%         2.3639%         2.2321%         5.1835%         3.6359%         3.2597%         3.1594%         3.1638%         2.8150%         2.7108%         5.3281%         1.2374%           Equity         10.0000%	81020000 Dividends Declared P/S w/ Wand Redempth Requiremts	45,900	44,570	45,900	45,900	45,900	45,900	45,900	45,900	45,900	45,900	45,614	42,075	22,950
Long Term Debt         5.1420%         5.1414%         5.1410%         5.1405%         4.6463%         4.7129%         4.7997%         4.7947%         4.8219%         4.8435%         4.8594%         4.8893%         5.0349%           Short Term Debt         2.8132%         2.4829%         2.3639%         2.3231%         5.1835%         3.6359%         3.1594%         3.1538%         2.8150%         2.7108%         5.3281%         1.2374%           Equity         10.0000%         <	Total: Interest on short-term debt	2,122,282	2,191,100	2,396,424	2,526,708	2,509,553	2,325,251	2,230,400	2,147,149	2,070,769	2,011,496	1,955,071	1,907,669	1,010,406
Short Term Debt       2.8132%       2.4829%       2.3639%       2.2321%       5.1835%       3.6359%       3.1594%       3.1594%       3.1638%       2.8150%       2.7108%       5.3281%       1.2374%         Equity       10.0000% <td>Overall Rate</td> <td></td>	Overall Rate													
Equity       10.000%	Long Term Debt	5.1420%	5.1414%	5.1410%	5.1405%	4.6463%	4.7129%	4.7597%	4.7947%	4.8219%	4.8435%	4.8594%	4.8893%	5.0349%
Ratio           Long Term Debt         44.9967%         44.5280%         43.246%         48.5403%         48.0751%         47.6483%         47.3273%         47.4084%         46.9913%         46.8016%         46.1281%         44.6839%           Short Term Debt         5.4991%         6.3609%         7.2527%         8.0066%         3.3966%         4.4475%         4.7178%         4.6557%         4.4928%         4.8630%         4.9435%         2.4178%         5.3443%           Equity         49.5042%         49.111%         48.5236%         48.2470%         48.0630%         47.4774%         47.6339%         48.0170%         48.0987%         48.1458%         48.2549%         51.4542%         49.9718%           Weighted Cost         Long Term Debt         2.3138%         2.2894%         2.2736%         2.2488%         2.2553%         2.2657%         2.2692%         2.2860%         2.2760%         2.2743%         2.2553%         2.0267%         0.1617%         0.1361%         0.1321%         0.1369%         0.1340%         0.1288%         0.02498%         0.4941%         4.8017%         4.8017%         4.8017%         4.8146%         4.8255%         5.1454%         4.9972%           Long Term Debt         0.1567%         0.1517%         0.1581%         <	Short Term Debt		2.4829%	2.3639%	2.2321%	5.1835%	3.6359%	3.2597%	3.1594%	3.1638%	2.8150%	2.7108%	5.3281%	1.2374%
Long Term Debt         44.9967%         44.5280%         44.2236%         43.7464%         48.5403%         47.6483%         47.3273%         47.4084%         46.9913%         46.8016%         46.1281%         44.6839%           Short Term Debt         5.4991%         6.3609%         7.2527%         8.0066%         3.3966%         4.4475%         4.7178%         4.6557%         4.4928%         4.8630%         4.9435%         2.4178%         5.3443%           Equity         49.5042%         49.1111%         48.5236%         48.2470%         48.0630%         47.4774%         47.6339%         48.0170%         48.0987%         48.1458%         48.2549%         51.4542%         49.9718%           Weighted Cost         Long Term Debt         2.23138%         2.2894%         2.2736%         2.2657%         2.2679%         2.2660%         2.2760%         2.27643%         2.2553%         2.2692%         2.2860%         2.27743%         2.2553%         2.2692%         2.2800%         2.27643%         2.2553%         2.2692%         2.2800%         2.27643%         2.2553%         2.2692%         2.2800%         2.27643%         2.2553%         2.2692%         2.2800%         2.27643%         2.2553%         2.2692%         2.2800%         2.27643%         2.2553%         2.2692	Equity	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%
Short Term Debt       5.4991%       6.3609%       7.2527%       8.0066%       3.3966%       4.4475%       4.7178%       4.6557%       4.4928%       4.8630%       4.9435%       2.4178%       5.3433%         Equity       49.5042%       99.111%       48.5236%       8.0066%       3.3966%       4.4475%       4.7178%       4.6557%       4.4928%       4.8630%       4.9435%       2.4178%       5.3443%         Weighted Cost       5.77%       0.1781%       0.1617%       0.1617%       0.1617%       0.1617%       0.1421%       0.1369%       2.2736%       2.2598       2.02657%       2.2679%       2.2860%       2.2760%       2.2733%       2.2528%       0.2014%       0.0218%       0.0261%       0.0161%       0.1617%       0.1617%       0.1617%       0.1421%       0.1369%       0.1369%       0.1286%       0.2528%       0.2629%       0.2496%       0.1369%       0.1369%       0.1369%       0.1369%       0.1261%       0.1617%       0.1617%       0.1617%       0.1411%       0.1421%       0.1369%       0.1369%       0.1369%       0.1461%       0.4817%       4.816%       4.8255%       5.1454%       4.9972%         Monthly AFUDC Rate       Feb-19       Mar-19       May-19       Jul-19       Aug-19       Sep-19 </td <td>Ratio</td> <td></td>	Ratio													
Equity       49.5042%       49.111%       48.5236%       48.2470%       48.0630%       47.4774%       47.6339%       48.0170%       48.0987%       48.1458%       48.2599%       51.4542%       49.9718%         Weighted Cost       Long Tem Debt       2.3138%       2.2894%       2.2736%       2.2485%       2.2657%       2.2657%       2.2692%       2.2860%       2.2743%       2.2553%       2.2498%         Short Term Debt       0.1547%       0.1579%       0.1714%       0.1787%       0.1617%       0.1538%       0.1471%       0.1369%       2.3130%       2.2553%       2.2657%       2.2667%       2.2860%       2.2760%       2.2743%       2.2553%       2.2498%         Short Term Debt       0.1547%       0.1579%       0.1714%       0.1787%       0.1617%       0.1637%       0.1471%       0.1421%       0.1369%       0.3140%       0.1288%       0.929%       0.920%       0.920%       0.3140%       0.1288%       0.1288%       0.4927%       4.8017%       4.8017%       4.8166%       4.8255%       5.1454%       4.9977%         Monthly AFUDC Rate       Feb-19       Mar-19       May-19       Jun-19       Aug-19       Sep-19       Oct-19       Nov-19       Dec-19       Jan-20       Feb-20 <t< td=""><td>Long Term Debt</td><td>44.9967%</td><td>44.5280%</td><td>44.2236%</td><td>43.7464%</td><td>48.5403%</td><td>48.0751%</td><td>47.6483%</td><td>47.3273%</td><td>47.4084%</td><td>46.9913%</td><td>46.8016%</td><td>46.1281%</td><td>44.6839%</td></t<>	Long Term Debt	44.9967%	44.5280%	44.2236%	43.7464%	48.5403%	48.0751%	47.6483%	47.3273%	47.4084%	46.9913%	46.8016%	46.1281%	44.6839%
Weighted Cost           Long Term Debt         2.3138%         2.2894%         2.2736%         2.2657%         2.2697%         2.2890%         2.2760%         2.2553%         2.2697%           Jong Term Debt         0.1547%         0.1579%         0.1714%         0.1761%         0.1617%         0.1538%         0.1471%         0.1421%         0.1369%         0.1340%         0.1288%         0.0661%           Equity         4.9504%         4.9111%         4.8524%         4.8247%         4.8063%         4.7477%         4.7634%         4.8017%         0.1421%         0.1369%         0.1288%         0.0661%           Monthly AFUDC Rate         Feb-19         Mar-19         Apr-19         Jun-19         Jul-19         Aug-19         Sep-19         Otc-19         Nov-19         Dec-19         Jan-20         Feb-20           AFUDC Debt         0.2060%         0.2020%         0.2020%         0.2010%         0.2010%         0.2010%         0.2010%         0.2010%         0.190%         0.1930%	Short Term Debt	5.4991%	6.3609%	7.2527%	8.0066%	3.3966%	4.4475%	4.7178%	4.6557%	4.4928%	4.8630%	4.9435%	2.4178%	5.3443%
Long Term Debt         2.3138%         2.2894%         2.2736%         2.2488%         2.2553%         2.2679%         2.2692%         2.2860%         2.2760%         2.2733%         2.2533%         2.2498%           Short Term Debt         0.1547%         0.1579%         0.1714%         0.1787%         0.1617%         0.1617%         0.1421%         0.1369%         0.1340%         0.1288%         0.0661%           Equity         4.9504%         4.9111%         4.8524%         4.8063%         4.7477%         4.7634%         4.8017%         4.8099%         4.8146%         4.8255%         5.1454%         4.9972%           Monthly AFUDC Rate         Feb-19         Mar-19         Apr-19         Jun-19         Jul-19         Aug-19         Sep-19         Ot-19         Nov-19         Dec-19         Jan-20         Feb-20           AFUDC Debt         0.2060%         0.2040%         0.2020%         0.2020%         0.2010%         0.2010%         0.2010%         0.2010%         0.2010%         0.1990%         0.1930%	Equity	49.5042%	49.1111%		48.2470%	48.0630%	47.4774%	47.6339%		48.0987%	48.1458%	48.2549%		49.9718%
Short Term Debt       0.1547%       0.1579%       0.1714%       0.1787%       0.1761%       0.1617%       0.1538%       0.1471%       0.1421%       0.1369%       0.1340%       0.1288%       0.0661%         Equity       4.9504%       4.9111%       4.8524%       4.8247%       4.8063%       4.7477%       4.7634%       4.8017%       0.1421%       0.1369%       0.1340%       0.1288%       0.0661%         Monthy AFUDC Rate       Feb-19       Mar-19       Apr-19       Jun-19       Jul-19       Aug-19       Sep-19       Ott-19       Nov-19       Dec-19       Jan-20       Feb-20         AFUDC Debt       0.2060%       0.2040%       0.2020%       0.2020%       0.2010%       0.2010%       0.2010%       0.2010%       0.190%       0.1930%	Weighted Cost													
Short Term Debt       0.1547%       0.1579%       0.1714%       0.1787%       0.1761%       0.1617%       0.1538%       0.1471%       0.1421%       0.1369%       0.1340%       0.1288%       0.0661%         Equity       4.9504%       4.9111%       4.8524%       4.8247%       4.8063%       4.7477%       4.7634%       4.8017%       0.1421%       0.1369%       0.1340%       0.1288%       0.0661%         Monthy AFUDC Rate       Feb-19       Mar-19       Apr-19       Jun-19       Jul-19       Aug-19       Sep-19       Ott-19       Nov-19       Dec-19       Jan-20       Feb-20         AFUDC Debt       0.2060%       0.2040%       0.2020%       0.2020%       0.2010%       0.2010%       0.2010%       0.2010%       0.190%       0.1930%	Long Term Debt	2.3138%	2.2894%	2.2736%	2.2488%	2.2553%	2.2657%	2.2679%	2.2692%	2.2860%	2.2760%	2.2743%	2.2553%	2.2498%
Equity         4.9504%         4.9111%         4.8524%         4.8247%         4.8063%         4.7477%         4.7634%         4.8017%         4.8099%         4.8146%         4.8255%         5.1454%         4.9972%           Monthly AFUDC Rate         Feb-19         Mar-19         Apr-19         May-19         Jul-19         Aug-19         Sep-19         Otc-19         Nov-19         Dec-19         Jan-20         Feb-20           AFUDC Debt         0.2060%         0.2020%         0.2020%         0.2020%         0.2010%         0.2010%         0.2010%         0.2010%         0.1930%         0.1930%														0.0661%
AFUDC Debt 0.2060% 0.2040% 0.2020% 0.2020% 0.2020% 0.2020% 0.2010% 0.2010% 0.2010% 0.2010% 0.1990% 0.1930%														4.9972%
AFUDC Debt 0.2060% 0.2040% 0.2020% 0.2020% 0.2020% 0.2020% 0.2010% 0.2010% 0.2010% 0.2010% 0.1990% 0.1930%	Monthly AFUDC Rate	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
														0.1930%
	AFUDC Equity	0.4130%	0.4090%	0.4040%	0.4020%	0.4010%	0.3960%	0.3970%	0.4000%	0.4010%	0.4010%	0.4020%	0.4290%	0.4160%

Note: AFUDC rate calculation uses financial statement data from prior month

#### AFUDC Rate Calculations

Schedule BWL-3

	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
Total Assets	2,447,236,512	2,469,616,165	2,486,426,055	2,502,890,896	2,577,036,395	2,622,098,931	2,641,586,429	2,630,969,951	2,663,030,806	2,687,323,825
Total Capital and Liabilities	2,443,403,479	2,474,583,985	2,488,536,280	2,500,504,898	2,571,859,038	2,604,655,766	2,612,844,109	2,603,773,416	2,627,258,262	2,647,349,409
Net Income	3,833,033	(4,967,820)	(2,110,225)	2,385,998	5,177,357	17,443,165	28,742,320	27,196,535	35,772,544	39,974,416
Long Term Debt										
Tota Long-Term Debt	706,299,234	706,306,557	816,087,637	816,095,588	816,103,540	816,111,492	816,119,443	816,127,395	816,135,346	816,143,298
18661000 Reg Asset - Unamortized Debt Exp	3,432,350	3,399,671	3,366,994	3,334,316	3,301,638	3,268,960	3,236,282	3,203,605	3,170,927	3,138,249
18661500 Reg Asset - Unamortized Debt Exp Interco Total Net Long Term Debt	4,585,227 698,281,657	4,561,161 698,345,725	5,498,175 807,222,468	5,673,889 807,087,383	5,646,594 807.155.308	5,619,298 807,223,233	5,592,003 807,291,158	5,564,707 807,359,083	5,537,412 807,427,008	5,510,116 807.494.933
	,,	,,	,	,	,	,	,	,	,	,
Preferred Stock										
Total Redeemable Preferred Stock at Redemption	0	0	0	0	0	0	0	0	0	C
Total Current Portion Redeemable Preferred Stock	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	C
18662000 Reg Asset - Unamortized Preferred Stock Exp	16,346	0	16,109	15,991	0	15,754	15,635	0	15,398	15,280
Total Net Preferred Stock	233,654	250,000	233,891	234,009	250,000	234,246	234,365	250,000	234,602	(15,280
Total Equity	778,798,850	778,837,281	778,837,281	818,882,336	818,931,495	818,931,495	818,993,373	859,052,000	859,052,000	859,100,513
Short Term Debt	99,561,032	122,728,815	35,821,696	7,079,730	87,621,701	26,073,920	16,673,527	0	0	0
Total	1,580,708,226	1,595,194,000	1,620,005,111	1,635,669,457	1,719,135,862	1,669,906,060	1,671,934,743	1,693,857,617	1,702,486,153	1,706,554,582
	2,500,700,220	2,355,254,000	1,020,000,111	2,000,000,407	1,, 13,135,002	1,000,000,000	2,072,504,740	1,050,057,017	1,702,400,100	1,700,004,002
Ratio of Current Portion of Preferred Stock										
Long Term Portion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Current Portion	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
YTD Financing Costs										
81010000 Interest Long Term Debt	374,871	562,307	749,743	937,178	1,124,614	1,312,050	1,499,486	1,686,921	1,874,357	2,061,793
81015000 Interest Long Term Debt Intercompany	5,458,959	8,193,738	11,118,325	14,169,354	17,220,384	20,271,413	23,322,442	26,373,471	29,424,501	32,475,530
81016000 Interest expense-LTD debt discount amort inside	14,646	21,970	29,649	37,600	45,552	53,504	61,455	69,407	77,359	85,310
81020000 Dividends Declared P/S w/ Mand Redemptn Requiremts	3,761	5,738	7,650	9,563	11,475	13,388	15,300	17,213	19,125	19,125
Total: Interest on short-term debt	208,705	412.323	500,030	526.251	841.077	951.283	1,060,826	1,151,008	1,208,711	1,264,577
	200,703	412,525	500,050	520,251	041,077	551,205	1,000,020	1,151,000	1,200,711	1,204,577
Annualized Financing Costs										
81010000 Interest Long Term Debt	2,249,228	2,249,228	2,249,228	2,249,228	2,249,228	2,249,228	2,249,228	2,249,228	2,249,228	2,249,228
81015000 Interest Long Term Debt Intercompany	32,753,754	32,774,953	33,354,976	34,006,451	34,440,767	34,750,994	34,983,663	35,164,628	35,309,401	35,427,851
81016000 Interest expense-LTD debt discount amort inside	87,878	87,878	88,947	90,241	91,104	91,721	92,183	92,543	92,830	93,066
81020000 Dividends Declared P/S w/ Mand Redemptn Requiremts	22,568	22,950	22,950	22,950	22,950	22,950	22,950	22,950	22,950	20,864
Total: Interest on short-term debt	1,252,228	1,649,290	1,500,091	1,263,001	1,682,153	1,630,771	1,591,238	1,534,678	1,450,453	1,379,538
Overall Rate										
Long Term Debt	5.0253%	5.0279%	4.4217%	4.5033%	4.5569%	4.5950%	4.6235%	4.6456%	4.6631%	4.6774%
Short Term Debt	1.2774%	1.3598%	4.2241%	17.5827%	1.9404%	6.2860%	9.5470%	0.0000%	0.0000%	0.0000%
Equity	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%	10.0000%
Ratio										
Long Term Debt	44.1752%	43.7781%	49.8284%	49.3429%	46.9512%	48.3394%	48.2848%	47.6787%	47.4401%	47.3164%
Short Term Debt	6.3133%	7.7093%	2.2256%	0.4471%	5.1114%	1.5754%	1.0113%	0.0000%	0.0000%	0.0000%
Equity	49.5115%	48.5126%	47.9460%	50.2099%	47.9374%	50.0851%	50.7039%	52.3213%	52.5599%	52.6836%
Weighted Cost										
Long Term Debt	2.2199%	2.2011%	2.2033%	2.2221%	2.1395%	2.2212%	2.2324%	2.2149%	2.2122%	2.2132%
Short Term Debt	0.0806%	0.1048%	0.0940%	0.0786%	0.0992%	0.0990%	0.0965%	0.0000%	0.0000%	0.0000%
Equity	4.9511%	4.8513%	4.7946%	5.0210%	4.7937%	5.0085%	5.0704%	5.2321%	5.2560%	5.2684%
Manthly ACUDO Data	Max 30	Any 20	May 20	lun 20	Ind 20	Aug 20	Can 20	Oct 20	Neu 20	Dec 20
Monthly AFUDC Rate AFUDC Debt	Mar-20 0.1920%	Apr-20 0.1920%	May-20 0.1910%	Jun-20 0.1920%	Jul-20 0.1870%	Aug-20 0.1930%	Sep-20 0.1940%	Oct-20 0.1850%	Nov-20 0.1840%	Dec-20 0.1840%
			0.1910%				0.1940%			
AFUDC Equity	0.4130%	0.4040%	0.4000%	0.4180%	0.3990%	0.4170%	0.4230%	0.4360%	0.4380%	0.4390%

Note: AFUDC rate calculation uses financial statement data from prior month