

Exhibit No.: 126
Issues: Revenue Lag Days Calculation, PSC
Assessment
Witness: Regina C. Tierney
Exhibit Type: Surrebuttal
Sponsoring Party: Missouri-American Water Company
Case No.: WR-2010-0131
SR-2010-0135
Date: May 6, 2010

MISSOURI PUBLIC SERVICE COMMISSION

**CASE NO. WR-2010-0131
CASE NO. SR-2010-0135**

SURREBUTTAL TESTIMONY

OF

REGINA C. TIERNEY

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

MAWC Exhibit No. 126
Date 5-17-10 Reporter KF
File No. WR 2010-031

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN) WATER COMPANY FOR AUTHORITY TO) FILE TARIFFS REFLECTING INCREASED) RATES FOR WATER AND SEWER) SERVICE)	CASE NO. WR-2010-0131 CASE NO. SR-2010-0135
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AFFIDAVIT OF REGINA C. TIERNEY

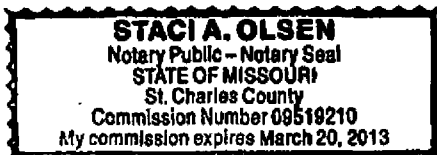
Regina C. Tierney, being first duly sworn, deposes and says that she is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of Regina C. Tierney"; that said testimony and schedules were prepared by her and/or under her direction and supervision; that if inquires were made as to the facts in said testimony and schedules, she would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of her knowledge.

Regina C. Tierney
Regina C. Tierney

State of Missouri
County of St. Louis
SUBSCRIBED and sworn to
Before me this 30~~th~~ day of April 2010.

Staci A. Olsen
Notary Public

My commission expires:



**SURREBUTTAL TESTIMONY
OF
REGINA C. TIERNEY
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR.2010.0131
SR.2010.0135**

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SURREBUTTAL TESTIMONY

REGINA C. TIERNEY

I. WITNESS INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Regina C. Tierney and my business address is 727 Craig Road, St. Louis, Missouri 63141.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by American Water Service Company, Inc. as a Financial Analyst II in Rates and Regulation.

Q. ARE YOU THE SAME REGINA TIERNEY WHO FILED DIRECT AND REBUTTAL TESTIMONY ON BEHALF OF MISSOURI-AMERICAN WATER COMPANY ("MAWC") IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to discuss on behalf of MAWC:

- 1) Staff's current revenue lag days calculation; and,
- 2) Staff's PSC Assessment position.

II. REVENUE LAG DAYS CALCULATION

1 Q. WHAT IS STAFF'S POSITION ON THE ST LOUIS METRO DISTRICT'S
2 REVENUE LAG?

3 A. Staff has used a weighted average for the revenue lag calculation that is based
4 upon the percentage of revenues for the St Louis Metro District's monthly and
5 quarterly billed customers to arrive at 37.43 Service Lag days and 64.20 total
6 Revenue Lag days. This is reflected in the Rebuttal Testimony of Staff witness
7 Jermaine Green.
8

9 Q. PLEASE DEFINE SERVICE LAG DAYS.

10 A. Service lag days are the average number of days between the time service is
11 rendered and the meter is read.
12

13 Q. DOES THE ST. LOUIS METRO DISTRICT HAVE ANY UNIQUE FEATURES
14 THAT IMPACT THIS CALCULATION?

15 A. Yes. The great majority of customers in the St. Louis Metro District are billed on
16 a quarterly basis, or every ninety (90) days.
17

18 Q. WHAT IMPACT DOES THIS HAVE ON THE SERVICE LAG DAY
19 CALCULATION?

20 A. MAWC reads meters on a billing cycle basis. That is, each route is read at
21 approximately the same time in each billing period. Since most of our customers
22 are billed quarterly, approximately 91 days exists in each billing period. The
23 earliest that service could be provided in any billing period would be on day 1 and
24 the latest date that service could be provided prior to reading meters would be on
25 day 91. Therefore, the average service lag for the St. Louis metro district would

1 typically be 45.5 days. This is complicated somewhat by the fact that a few
2 residential and many commercial and industrial customers are billed monthly,
3 rather than quarterly. Therefore, the net service lag days for the St. Louis Metro
4 District would be somewhat below 45.5 days.

5
6 **Q. PLEASE DEFINE BILLING AND COLLECTION LAG DAYS.**

7 A. Billing lag days are the average number of days between the time the meter is
8 read and the bill is issued. Depending upon weekends and holidays, this is
9 typically five to six days. Collection lag days are the average number of days
10 between the time a bill is rendered and when the Company receives payment.
11 This number can vary a good deal from year to year because it is dependent
12 upon many factors outside the control of the Company. Together, these three
13 components comprise the total revenue lag.

14
15 **Q. DO YOU AGREE WITH STAFF WITNESS GREEN'S POSITION CONCERNING**
16 **THE ST. LOUIS METRO DISTRICT'S REVENUE LAG?**

17 A. No, I do not. Mr. Green's calculation, while closer to the lag proposed by MAWC
18 than is reflected in his direct testimony, still does not accurately reflect the
19 revenue lag that should be used in calculating the Cash Working Capital. Based
20 upon the 64.20 day revenue lag calculated by Staff, there is still a discrepancy
21 between Staff's and MAWC's Cash Working Capital calculation of \$2,027,584, of
22 which \$1,733,791 is directly attributed to the St Louis Metro District Revenue
23 Lag. Attached as Schedule RCT - 1 is a spreadsheet that explains the value of
24 this issue. Determining the cause of this difference between the Company and

1 Staff requires further discussion of the three components of the St Louis Metro
2 District's revenue lag.

3

4 **Q. HAS THE STAFF CORRECTLY CALCULATED THE SERVICE LAG**
5 **COMPONENT OF THE REVENUE LAG FOR THE ST. LOUIS METRO**
6 **DISTRICT?**

7 A. No. The Staff calculated a Service Lag (the average number of days between
8 meter readings and billing) of 37.43 days. This does not accurately represent the
9 service lag days. Schedule RCT – 2 contains my calculation of this Service Lag.
10 My Service Lag calculation is based on the number of routes read during the test
11 year ending June 30, 2009. This focuses on reading routes and not the revenue
12 generated from these reading routes. This method strips out the unnecessary
13 factors and includes only the average of days between the readings.

14

15 **Q. HOW DOES THIS DIFFER FROM THE STAFF'S CALCULATION?**

16 A. Staff's method uses a weighting based on revenue, an unnecessary factor in the
17 Lag calculation. Revenue generated from the readings should not be included to
18 determine the Lag days between readings, as the lag is only to determine the
19 average of actual days between readings and should not be weighted.

20

21 **Q. WHY IS YOUR METHOD MORE ACCURATE?**

22 A. Use of the lag weighted by the routes read provides a more accurate view of the
23 average of actual days between the reading dates. By contrast, Staff's use of
24 revenues in the weighting process assumes that the days between meter
25 readings are directly related to the revenue earned from the readings.

1

2 **Q. WHY IS THIS ASSUMPTION ERRONEOUS?**

3 A. Each and every business day, meter readings are completed for quarterly as well
4 as monthly customers in the St. Louis Metro District. Weighting based on the
5 number of actual reads provides equal weight to each reading route and the
6 calculated Service Lag for that route. Service Lag is determined by the number
7 of days between readings, and has no correlation to the revenue collected per
8 reading route. For example, to determine the average amount of time spent
9 doing a task, you do not divide the amount of time weighted by the revenue
10 earned doing the task. You divide the amount of time by the number of tasks.
11 Weighting by the revenue earned is only valid when determining the cost verses
12 the revenue earned in completing the task. Revenue earned should be a
13 weighting factor in the determination of the collection lag only as the total annual
14 revenue is one of the components in calculating that lag.

15

16 **Q. WHAT SERVICE LAG SHOULD BE USED FOR THE ST. LOUIS METRO**
17 **DISTRICT?**

18 A. The Service Lag calculated by MAWC of 40.53 days should be used in
19 calculating the necessary cash working capital. This lag verifies that the majority
20 of routes read are for quarterly customers, as it is very close to half of an
21 approximate 91 day period between read dates. The calculation of this amount
22 is found in Schedule RCT - 2.

23

24 **Q. HOW DO YOU PROPOSE THAT THE BILLING COMPONENT OF THE**
25 **REVENUE LAG BE CALCULATED?**

1 A. The Billing Lag, or the amount of days between read date and bill creation date,
2 should also be based on the routes read during the test year.

3

4 **Q. HOW HAS STAFF CALCULATED ITS BILLING LAG?**

5 A. Staff has used only five summary lines of information that were provided in
6 MAWC's calculation to determine their Billing Lag. There were over 1.7 Million
7 lines of data available in MAWC's supplemental file that was too large to include
8 the Cash Working Capital Lag support. The summary lines were included in
9 MAWC's file to show a proper analysis has been performed. These summary
10 lines should not be used to calculate the billing lag, because the sample size is
11 not valid in comparison to the size of the population.

12

13 **Q. ARE THERE OTHER PROBLEMS WITH STAFF'S APPROACH?**

14 A. Yes. Staff's sample size is not only miniscule as compared to the 1.7 Million
15 lines of data available, but it does not conform to various theories of statistical
16 analysis sample size. A statement on the MAWC workpaper notes that the detail
17 was not provided due to its voluminous size.

18

19 **Q. WHAT BILLING LAG DID MAWC CALCULATE?**

20 A. When using all lines of the available data, I calculated a Billing Lag of 5.83.
21 Schedule RCT - 2 contains the calculation of this lag.

22

23 **Q. HAS THE STAFF MADE ANY ERRORS IN ITS CALCULATION OF THE**
24 **COLLECTION COMPONENT OF THE REVENUE LAG?**

1 A. Yes. The Collection Days Lag should be calculated by dividing the actual
2 Average Daily Balance of Accounts Receivable by Actual Revenues during the
3 test period to arrive at the average number of days that bills are outstanding.
4 Staff attempted to follow this approach, but erred by utilizing its Pro-forma
5 Annualized Revenues in the calculation of Collection Days Lag. This is not
6 consistent with Staff's use of the actual Average Daily Balance of Accounts
7 Receivable.

8
9 **Q. WHY IS THIS SIGNIFICANT?**

10 A. Properly calculating the collection lag by comparing the actual Average Daily
11 Balance in Accounts Receivable to the actual Annual Revenues over the same
12 period of time uses two amounts that have a direct relationship with each other.
13 Staff's calculation, on the other hand, uses an actual amount of accounts
14 receivable outstanding compared to an estimate for the Annual Revenue that has
15 no relationship to the Accounts Receivable balance. If Staff is to utilize a higher
16 estimated Pro-forma Annual Revenue, they should also reflect a corresponding
17 higher Accounts Receivable balance. Staff's calculation does not take this into
18 account.

19
20 **Q. WHAT COLLECTION LAG HAVE YOU CALCULATED?**

21 A. The Collection Lag I have calculated is 24.04 days (See Schedule RCT - 2).
22

23 **Q. IS THE COLLECTION LAG DISAGREEMENT LIMITED TO THE ST. LOUIS**
24 **METRO DISTRICT?**

1 A. No. Staff has used this same method in the Collection Days Lag calculation for
2 all districts.

3

4 **Q. WHAT SHOULD THE COMMISSION FIND IN REGARD TO THE COLLECTION**
5 **LAG?**

6 A. The Collection Lag should be calculated in a manner consistent with the
7 Company's approach, utilizing the Annual Revenue for the test year and not an
8 estimated annualized amount. Schedule RCT – 3 contains a reconciliation
9 between Staff's and Company's Collection lag for all of the districts.

10

11 **Q. PLEASE SUMMARIZE THE COMPANY'S POSITION IN REGARD TO THE**
12 **REVENUE LAG DAYS.**

13 A. In summary, the Revenue Lag for St Louis Metro District should be the
14 combination of the Service Lag (40.53), the Billing Lag (5.83) and Collection Lag
15 (24.04) which totals 70.39 Revenue Lag Days (See Schedule RCT – 2).
16 Schedule RCT – 3 shows the Total Revenue Lag Days requested for the other
17 Districts. This schedule summarizes the Collection Lag variance that is the
18 majority of the difference between Staff's and Company's Revenue Lag Days.

19

20

III. PSC ASSESSMENT

21

22 **Q. WHAT IS STAFF'S POSITION AS TO THE PSC ASSESSMENT?**

23 A. The Rebuttal Testimony of Staff witness Jermaine Green, page 5, line 13, states
24 that "Staff believes there is no exact correlation between revenues and the PSC
25 Assessment. The calculation of the PSC Assessment for each utility is

1 determined by many factors other than just revenues." Mr. Green further states
2 that costs "are re-allocated to the industries based on the percentage of
3 revenues collected by each industry".
4

5 **Q. DO YOU AGREE WITH THIS STATEMENT?**

6 A. No. While, his statement is technically correct, it is not complete. It is true that in
7 addition to revenues other factors are also used in determining the PSC annual
8 expense amount. However, the only determinant in the final allocation factor is
9 the percentage of revenues collected by each company within each industry
10 group.
11

12 **Q. WHAT FACTORS ARE USED IN THE CALCULATION OF THE**
13 **ASSESSMENT?**

14 A. The first component of the annual assessment amount is the estimate of the
15 expenses directly attributable to regulation of the six public utility groups. The
16 second component is any reimbursements and unexpended balance in the fund
17 at June 30th netted against the expense estimate. The unexpended balance in
18 the fund is also allocated based on the same percentage as the annual
19 attributable expense allocation. The amount allotted to each industry group is
20 allocated to the companies within that group. Any common costs not easily
21 attributable to a specific utility group are allocated based on the percentage of
22 each company's gross intrastate operating revenue compared to the total gross
23 intrastate operating revenue for that group. In summary, the determination of the
24 allocation is based upon revenue percentage of the entire utility group.
25

1 **Q. WHEN WILL THE NEXT FISCAL YEAR ASSESSMENT ORDER BE ISSUED**
2 **BY THE COMMISSION?**

3 A. It is the Company's understanding that the 2011 fiscal year assessment, the
4 assessment that MAWC will actually begin paying effective July 1, 2010, will be
5 available near the end of June of this year. That is almost three months prior to
6 the operation of law date in this case.

7
8 **Q. WHAT IS MAWC'S PREFERENCE AS TO THIS ISSUE?**

9 A. MAWC's preference would be to utilize the actual assessment amount as
10 ordered by the Commission in June of this year. However, if this is not possible,
11 a reasonable approximation of this amount should be used in calculating the
12 revenue requirement.

13
14 **Q. IF THE ASSESSMENT HAS NOT BEEN ISSUED, IS IT A KNOWN AND**
15 **MEASUREABLE EXPENSE THAT IS PROPER FOR INCLUSION IN THIS**
16 **CASE?**

17 A. Yes. It is indisputable that the Commission will require funding in fiscal year
18 2011 and that the funding will come from assessments of the regulated utilities in
19 the state. The amount is also measureable through reasonable estimation. The
20 Staff has estimated many of the expense items included in the revenue
21 requirements of this case, using historical averages or estimates of expense
22 levels that will be in effect at the time new rates go into effect. It is also
23 appropriate to use a proxy based on reasonable estimates of PSC assessments
24 that will be in place at the time new rates become effective. Based on the
25 increase in revenues and the level of Commission expenditures associated with

1 regulated water companies' activities, it is reasonable to project an increase in
2 assessments assigned to MAWC.

3
4 **Q. WHY DO YOU BELIEVE MAWC'S ASSESSMENT WILL INCREASE OVER**
5 **THE AMOUNT CURRENTLY CHARGED?**

6 A. MAWC's contributions pay for approximately 9% of the total PSC 2010 fiscal year
7 expenses attributable to all utility groups, 94% of the Water group expenses and
8 8% of the Sewer group expenses. Since MAWC contributions fund 94% of the
9 Water group expenses, MAWC activities in this rate case have an overwhelming
10 influence on the estimate for the 2011 fiscal year. MAWC believes the
11 Commission and its Staff have worked many hours on this rate case, which will
12 be utilized in determining the estimate of the future PSC Assessment hours. Mr.
13 Green has also stated on page 6 of his rebuttal testimony that if the Staff incurs
14 more hours in one industry group, the PSC Assessment could decrease in
15 another industry group. MAWC does not believe that it would be reasonable to
16 assume a decrease in the water industry group as there is a current rate case for
17 MAWC in the Water industry group, and in the prior fiscal year there was not.
18 The additional hours worked on the 2010 rate case would increase the future
19 expense amount for MAWC over the amount currently charged to MAWC.
20 Allowing for recovery to reflect increased water revenues would properly reflect
21 the probable increase in the 2011 Fiscal Year Assessment Order.

22
23 **Q. WHAT AMOUNT DO YOU PROPOSE TO USE AS THE PSC ASSESSMENT**
24 **EXPENSE AMOUNT?**

1 A. MAWC continues to believe that its proposed PSC Assessment of \$1,869,759 is
2 appropriate. MAWC would also support using the amount from the Assessment
3 Order for Fiscal Year 2011. Although this amount will not be available by the
4 true-up date of April 30, 2010, the actual assessment will be issued near the end
5 of June 2010. Utilization of the actual assessment would eliminate any
6 estimation uncertainties and would be fair to all parties.

7

8 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

9 A. Yes, it does.

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
Staff's Annualized Results													
Labor	117,898.00	911,723.00	1,495,420.00	327,774.00	264,273.00	5,787.00	1,793,695.00	17,682,475.00	40,969.00	129,092.00	280,508.00	109,659.00	23,159,273.00
Tax Withholding	12,720.00	331,377.00	703,967.00	145,925.00	130,591.00	18,877.00	907,648.00	11,265,669.00	9,888.00	70,561.00	186,752.00	14,586.00	13,798,561.00
Pensions & OPEB's	71,003.00	556,952.00	121,206.00	188,496.00	32,128.00	2,234.00	627,600.00	6,523,271.00	57,303.00	83,116.00	152,809.00	37,206.00	8,453,324.00
Group Insurance	12,658.00	106,763.00	225,012.00	41,769.00	33,616.00	849.00	249,103.00	3,164,353.00	2,231.00	2,396.00	43,713.00	9,971.00	3,892,434.00
401K Withheld	3,671.00	15,703.00	32,781.00	5,436.00	3,690.00	1,732.00	23,027.00	406,805.00	721.00	1,723.00	5,813.00	386.00	501,488.00
Fuel & Power	15,490.00	239,483.00	913,043.00	204,643.00	226,329.00	-	870,015.00	6,847,300.00	6,173.00	15,255.00	201,193.00	25,011.00	9,563,935.00
Chemicals	8,366.00	351,131.00	629,552.00	75,338.00	136,927.00	-	918,866.00	10,661,815.00	2,530.00	-	38,560.00	-	12,823,085.00
Rents	-	32,153.00	80,513.00	13,480.00	12,074.00	173.00	97,369.00	775,924.00	1,223.00	3,855.00	1,223.00	-	1,017,987.00
Management Fees	-	581,226.00	1,355,520.00	249,171.00	286,916.00	-	1,876,707.00	21,672,947.00	3,251.00	16,497.00	368,230.00	29,332.00	26,439,997.00
Uncollectibles	2,618.00	56,357.00	193,194.00	23,286.00	22,698.00	220.00	199,129.00	1,482,193.00	1,597.00	1,809.00	32,043.00	3,670.00	2,018,814.00
PSC Assessment	2,417.00	43,614.00	119,150.00	24,371.00	33,857.00	3,549.00	119,150.00	1,110,055.00	1,648.00	9,846.00	26,733.00	33,801.00	1,528,191.00
Insurance Other	23,824.00	193,578.00	330,784.00	69,798.00	58,140.00	1,216.00	354,469.00	3,884,598.00	8,655.00	26,922.00	58,384.00	22,647.00	5,033,015.00
Purchased Water	-	-	-	-	133,780.00	-	-	211,597.00	-	-	-	-	345,377.00
Cash Vouchers	132,670.00	743,732.00	1,165,736.00	278,587.00	289,744.00	30,796.00	1,285,455.00	(170,269.00)	46,493.00	(3,831.00)	33,828.00	46,140.00	3,879,081.00
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
	403,335.00	4,163,792.00	7,366,078.00	1,648,074.00	1,664,763.00	65,433.00	9,322,233.00	85,518,733.00	182,682.00	357,241.00	1,429,789.00	332,409.00	112,454,562.00
FICA - Employer Portion	8,509.00	65,941.00	120,572.00	24,513.00	18,511.00	411.00	135,984.00	1,193,610.00	2,956.00	8,826.00	21,201.00	8,170.00	1,609,204.00
Unemployment Tax	426.00	3,637.00	7,167.00	1,368.00	1,207.00	22.00	8,047.00	64,311.00	159.00	476.00	1,392.00	438.00	88,650.00
Property Taxes	26,649.00	349,313.00	1,140,952.00	190,887.00	765,248.00	-	1,025,824.00	9,308,182.00	149,697.00	-	245,525.00	-	13,202,277.00
Franchise Tax	867.00	8,103.00	40,708.00	6,919.00	12,538.00	18.00	37,305.00	291,263.00	463.00	1,258.00	7,411.00	137.00	406,990.00
	36,451.00	426,994.00	1,309,399.00	223,687.00	797,504.00	451.00	1,207,160.00	10,857,366.00	153,275.00	10,560.00	275,529.00	8,745.00	15,307,121.00
Federal Income Tax	13,684.00	137,852.00	1,382,868.00	179,693.00	333,363.00	2.00	686,050.00	5,046,648.00	4,987.00	36,888.00	173,927.00	-	7,995,962.00
State Income Tax	4,526.00	21,663.00	225,055.00	29,244.00	54,253.00	1.00	111,651.00	812,092.00	2,050.00	7,991.00	28,306.00	-	1,296,832.00
Interest Expense	54,642.00	448,737.00	2,521,160.00	438,285.00	785,907.00	914.00	2,586,652.00	17,414,888.00	36,895.00	100,219.00	502,892.00	5,656.00	24,896,847.00
	72,852.00	608,252.00	4,129,083.00	647,222.00	1,173,523.00	917.00	3,384,353.00	23,273,628.00	43,932.00	145,098.00	705,125.00	5,656.00	34,189,641.00

MAWC - Revenue (Lead)/Lag

Labor	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Tax Withholding	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Pensions & OPEB's	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Group Insurance	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
401K Withheld	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Fuel & Power	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Chemicals	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Rents	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Management Fees	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Uncollectibles	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
PSC Assessment	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Insurance Other	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Purchased Water	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Cash Vouchers	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
ESOP	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
FICA - Employer Portion	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Unemployment Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Property Taxes	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Franchise Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Federal Income Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
State Income Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Interest Expense	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
MO PSC - Revenue (Lead)/Lag													
Labor	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Tax Withholding	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Pensions & OPEB's	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Group Insurance	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
401K Withheld	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Fuel & Power	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Chemicals	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Rents	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Management Fees	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Uncollectibles	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
PSC Assessment	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Insurance Other	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Purchased Water	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Cash Vouchers	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
ESOP	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
FICA - Employer Portion													
Unemployment Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Property Taxes	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Franchise Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Federal Income Tax													
State Income Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Interest Expense	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Calculation of (Impact relating to Revenue (Lead)/Lag variance (Staff's Annualized Results multiplied by the difference of Mo PSC & MAWC Net(Lead)/Lag) multiplied by the Average daily cash balance)													
Labor	12,219.40	6,844.17	16,797.87	1,302.12	2,613.77	57.24	3,882.24	299,875.40	257.04	(1,206.04)	1,544.72	7,949.53	352,137.44
Tax Withholding	1,318.35	2,487.60	7,907.57	579.70	1,291.60	186.70	1,964.50	191,053.40	62.04	(659.21)	1,028.42	1,057.39	208,278.05
Pensions & OPEB's	7,359.02	4,180.95	1,361.49	748.82	317.76	22.10	1,358.37	110,627.53	359.52	(776.51)	841.50	2,697.18	129,097.72
Group Insurance	1,311.92	801.45	2,527.53	165.93	332.48	8.40	539.15	53,663.96	14.00	(22.38)	240.72	722.83	60,305.99
401K Withheld	380.48	117.88	368.22	21.60	36.50	17.13	49.84	6,898.97	4.52	(16.10)	32.01	27.98	7,939.03
Fuel & Power	1,605.44	1,797.76	10,256.10	812.97	2,238.49	-	1,883.05	116,122.70	38.73	(142.52)	1,107.94	1,813.13	137,533.78
Chemicals	867.08	2,635.89	7,071.68	299.29	1,354.26	-	1,988.78	180,812.70	15.87	-	212.34	-	195,257.90
Rents	-	241.37	904.39	53.55	119.42	1.71	210.74	13,158.82	7.67	(36.02)	6.73	-	14,668.40
Management Fees	-	4,363.18	15,228.64	989.86	2,837.72	-	4,061.91	367,549.43	20.40	(154.12)	2,027.79	2,126.37	399,051.16
Uncollectibles	271.34	423.06	2,170.12	92.51	224.49	2.18	430.99	25,136.37	10.02	(16.90)	176.46	266.05	29,186.69
PSC Assessment	250.51	327.40	1,338.40	96.82	334.86	35.10	257.89	18,825.32	10.34	(91.99)	147.21	2,450.34	23,982.20
Insurance Other	2,469.21	1,453.16	3,715.66	277.28	575.03	12.03	767.21	65,878.52	54.30	(251.52)	321.51	1,641.75	76,914.14
Purchased Water	-	-	-	-	1,323.14	-	-	3,588.45	-	-	-	-	4,911.59
Cash Vouchers	13,750.43	5,583.08	13,094.57	1,106.72	2,865.69	304.59	2,782.22	(2,887.58)	291.70	35.79	186.29	3,344.83	40,458.32
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion													
Unemployment Tax	881.91	495.01	1,354.37	97.38	183.08	4.06	294.32	20,242.32	18.55	(82.46)	116.75	592.27	24,197.56
Property Taxes	44.15	27.30	80.51	5.43	11.94	0.22	17.42	1,090.64	1.00	(4.45)	7.67	31.75	1,313.58
Franchise Tax	2,762.00	2,622.24	12,816.17	758.32	7,568.62	-	2,220.28	157,856.57	939.19	-	1,352.07	-	188,895.46
Interest Expense	89.86	60.83	457.27	27.49	124.01	0.18	80.74	4,939.50	2.90	(11.75)	40.81	9.93	5,821.76
Federal Income Tax													
State Income Tax	1,418.26	1,034.83	15,533.59	713.85	3,297.10	0.02	1,484.88	85,585.62	31.29	(344.62)	957.79	-	109,712.60
Interest Expense	469.09	162.62	2,528.02	116.17	536.58	0.01	241.66	13,772.19	12.86	(74.66)	155.88	-	17,920.43
Total	47,468.46	35,659.79	115,512.16	8,265.79	28,186.51	651.65	24,516.18	1,733,790.83	2,151.93	(3,855.45)	10,504.60	24,731.33	2,027,583.79

	BRU	JFC	JOP	MEX	PKW	PKS	SIO	SLM	WCW	WCS	WAR	CDH	Total
MAWC - Expense (Lead)/Lag													
Labor	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Tax Withholding	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50
Pensions & OPEB's	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)
Group Insurance	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)
401K Withheld	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
Fuel & Power	28.47	24.26	24.60	24.99	27.10	27.10	27.90	28.04	30.20	30.20	32.79	20.52	
Chemicals	13.58	13.64	13.73	7.14	13.78	13.78	13.01	15.58	13.66	13.66	22.28	13.58	
Rents	41.27	41.27	(4.57)	43.82	(127.50)	(127.50)	(10.71)	(4.00)	46.29	46.29	(16.41)		
Management Fees	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)
Uncollectibles													
PSC Assessment	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)
Insurance Other	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)
Purchased Water					35.68	35.68		33.82					
Cash Vouchers	18.86	30.04	17.61	14.80	25.56	25.56	23.69	21.08	43.30	43.30	20.25	26.05	
ESOP					35.19	35.19		42.25					
FICA - Employer Portion													
Unemployment Tax	0.63	0.65	0.80	0.79	0.78	0.78	0.80	0.71	0.63	0.63	1.44	0.61	
Property Taxes	175.50	175.50	170.62	175.50	175.50	175.50	174.35	178.77	159.50	159.50	175.50		
Franchise Tax	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63
Federal Income Tax													
State Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64
Interest Expense	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00
MO PSC - Expense (Lead)/Lag													
Labor	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Tax Withholding	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Pensions & OPEB's	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)
Group Insurance	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)
401K Withheld	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50
Fuel & Power	28.47	24.26	24.60	24.99	27.10	27.10	27.90	28.04	30.20	30.20	32.79	20.52	
Chemicals	13.58	13.64	13.73	7.14	13.78	13.78	13.01	15.58	13.66	13.66	22.28	13.58	
Rents	41.27	41.27	(4.57)	43.82	(127.50)	(127.50)	(10.71)	(4.00)	40.59	40.59	(16.41)		
Management Fees	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99
Uncollectibles													
PSC Assessment	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)
Insurance Other	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)
Purchased Water					35.68	35.68		33.82					
Cash Vouchers	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99
ESOP					35.19	35.19		42.25					
FICA - Employer Portion													
Unemployment Tax	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Property Taxes	175.50	174.50	170.62	175.50	175.50	175.50	174.35	178.77	159.50	159.50	175.50		
Franchise Tax	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63
Federal Income Tax													
State Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64
Interest Expense	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
Calculation of Impact relating to Expense (Lead)/Lag variance (Staff's Annualized Results multiplied by the difference of Mo PSC & MAWC Net(Lead)/Lag) multiplied by the Average daily cash balance)													
Labor	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax Withholding	(121.97)	(3,177.59)	(3,741.63)	(787.60)	(669.06)	(96.71)	(4,699.88)	(57,408.61)	(51.47)	(367.30)	(1,038.65)	(139.87)	(72,300.34)
Pensions & OPEB's	-	-	-	-	-	-	-	-	-	-	-	-	-
Group Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-
401K Withheld	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel & Power	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-	-	-	-	-
Rents	-	-	-	-	-	-	-	-	(19.10)	(60.20)	-	-	(79.30)
Management Fees	-	55,686.23	129,889.12	23,872.63	27,488.91	-	179,803.96	2,076,446.46	311.47	1,580.55	35,279.46	2,810.25	2,533,169.03
Uncollectibles	-	-	-	-	-	-	-	-	-	-	-	-	-
PSC Assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchased Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash Vouchers	1,864.65	(12,327.61)	20,376.43	7,014.29	(1,246.30)	(132.46)	1,056.54	(1,357.49)	(2,459.67)	202.68	346.62	(260.41)	13,077.26
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	27.97	224.02	961.27	192.75	151.13	3.36	1,102.77	9,516.18	23.00	68.67	135.92	27.08	12,434.13
Unemployment Tax	13.27	113.10	250.55	47.75	42.49	0.77	282.42	2,278.20	5.65	16.91	45.88	13.67	3,110.66
Property Taxes	-	(957.02)	-	-	-	-	-	-	-	-	-	-	(957.02)
Franchise Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
State Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,783.92	39,561.12	147,735.74	30,339.82	25,767.18	(225.05)	177,545.81	2,029,474.73	(2,190.12)	1,441.31	34,769.23	2,450.73	2,488,454.41
Total impact to Rate Base	49,252.38	75,220.91	263,247.90	38,605.60	53,953.70	426.60	202,061.99	3,763,265.56	(38.18)	(2,414.14)	45,273.83	27,182.05	4,516,038.20
Cash Working Capital													
MO PSC Cash Working Capital													
Labor	11,951.30	66,343.46	107,137.62	27,200.75	15,610.21	341.83	132,340.29	2,449,386.13	3,029.46	11,561.69	18,536.58	8,183.87	2,851,623.20
Tax Withholding	1,289.42	24,113.35	50,434.90	12,109.78	7,713.81	1,115.04	66,967.02	1,560,526.64	731.17	6,319.56	12,340.98	1,088.56	1,744,750.22
Pensions & OPEB's	9,802.30	60,959.54	13,648.13	23,347.68	3,219.84	223.89	72,096.62	1,172,222.86	6,590.63	10,857.45	16,319.16	4,141.59	1,393,429.71
Group Insurance	2,024.59	14,022.52	30,262.57	6,087.97	4,104.84	103.67	34,069.10	637,898.89	305.43	365.44	5,625.20	1,328.19	736,198.41
401K Withheld	316.81	906.04	1,994.70	391.99	178.84	83.94	1,453.54	52,048.75	45.61	135.90	319.95	22.99	57,899.07
Fuel & Power	871.26	9,382.48	37,797.48	10,557.34	5,016.44	-	30,128.74	678,351.69	175.72	672.47	2,645.83	1,282.76	776,882.21
Chemicals	811.85	23,973.11	44,810.30	7,570.95	8,031.80	-	69,305.15	1,420,212.18	186.67	-	1,617.41	-	1,576,519.42
Rents	-	(238.73)	9,767.44	-	5,381.70	77.11	13,671.67	144,980.87	-	60.20	180.94	-	173,881.20
Management Fees	-	23,201.27	58,388.82	13,537.15	8,804.00	-	85,094.52	2,387,586.85	147.85	1,007.90	13,720.35	1,225.52	2,592,714.22
Uncollectibles	351.46	5,953.77	21,018.45	2,795.60	2,188.34	21.21	22,116.96	260,703.54	177.60	229.42	3,299.99	394.55	319,250.87
PSC Assessment	622.46	9,984.62	27,652.59	5,930.50	7,438.34	779.71	27,923.54	332,104.13	386.44	2,462.58	6,048.98	7,801.09	429,134.97
Insurance Other	5,348.32	37,920.07	65,839.61	14,678.62	10,852.27	226.98	71,359.95	1,033,835.20	1,743.57	5,843.92	11,281.71	4,478.52	1,263,408.74
Purchased Water	-	-	-	-	(179.60)	-	-	17,611.83	-	-	-	-	17,432.23
Cash Vouchers	9,090.62	29,688.15	50,206.49	15,135.29	8,890.77	944.97	58,285.70	(18,757.58)	2,114.48	(234.06)	1,260.44	1,927.77	158,553.05
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	862.56	4,798.34	8,638.24	2,034.24	1,093.42	24.28	10,033.01	165,339.51	218.58	790.47	1,401.01	609.73	195,843.38
Unemployment Tax	43.18	264.65	513.47	113.53	71.30	1.30	593.71	8,908.39	11.76	42.63	91.99	32.69	10,688.60
Property Taxes	(9,235.89)	(130,097.56)	(409,211.03)	(68,865.75)	(294,169.72)	-	(376,069.89)	(2,921,749.07)	(48,768.41)	-	(92,768.09)	-	(4,350,935.41)
Franchise Tax	46.01	198.25	1,124.21	268.99	190.99	0.27	1,115.06	27,586.20	13.90	57.42	161.62	3.61	30,766.53
Federal Income Tax	725.81	3,368.88	38,152.00	6,980.95	5,068.94	0.03	20,487.52	477,841.52	149.61	1,682.70	3,788.27	-	558,246.24

State Income Tax
Interest Expense

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
	240.06	529.41	6,209.05	1,136.11	824.94	0.02	3,334.24	76,892.88	61.50	364.52	616.53	-	90,209.25
	(6,287.57)	(64,470.60)	(354,274.78)	(56,652.84)	(120,168.41)	(139.75)	(357,595.78)	(1,278,682.19)	(5,095.55)	(12,276.14)	(73,587.57)	(802.07)	(2,330,033.25)
	<u>28,874.57</u>	<u>120,801.02</u>	<u>(189,889.73)</u>	<u>24,358.84</u>	<u>(319,836.94)</u>	<u>3,804.49</u>	<u>(13,289.32)</u>	<u>8,684,849.21</u>	<u>(37,773.99)</u>	<u>29,944.08</u>	<u>(67,098.71)</u>	<u>31,719.34</u>	<u>8,296,462.86</u>

(Sample Size) # Rows of Routes Read information	SLC Percent	% Weighted	Service <u>Lag</u>	Billing <u>Lag</u>	Service <u>Lag</u>	Billing <u>Lag</u>	Weighting	Weighted Service <u>Lag</u>	Weighted Billing <u>Lag</u>
Residential 1	668,187	46.88%	42.90476	6.017428	20.11205142	2.820732	90.00%		
Residential 2	652,878	45.80%	44.69978	5.571633	20.47341525	2.551922	90.00%		
Non Residential	104,369	7.32%	37.96504	8.15411	2.779766324	0.597037	90.00%		
St Louis County	1,425,434	100.00%						39.02871	5.372722
St Charles	361,074				14.97	4.56	10.00%	1.497	0.456
Total SLM	1,786,508								
Average					58.335233	10.52969		40.53	5.83

Missouri American Water Company
 Test Year Ended 06/30/09
 Lead/Lag Study

Line No.		<u>Days</u>	<u>Days</u>	<u>Days</u>
1	REVENUE LAG ST. LOUIS			
2				
3				
4	Service Lag	40.53		
5				
6	Billing Lag		5.83	
7				
8	Avg. Daily Balance Accts. Receivable			\$ 9,444,886
9	Total Annual Revenues			143,428,470
10	Avarage Daily Revenues			392,955
11	Avg. No. Days of Revenue Receivalbe/			
12	Collection Lag Days			24.04
13				
14	Total Revenue Lag Days			70.39

Line No.	Days	Days	Days	Staff & MAWC Variance in Collection Lag Days
1	REVENUE LAG BRUNSWICK			
2				
3				
4	14.70	disallowed by staff		
5	15.21	Staff's Service Lag		
6		4.82	Staff's Calculation	
7				
8			55,050.59	55,050.59
9			298,661.00	346,907.48 Staff's Annualized Revenues
10			818.25	950.43
11	Avg. No. Days of Revenue Receivable/			
12			67.28	57.92 9.36
			Staff's Proposed Reduction 50%	0.50
			Adjusted Collection Lag Day	28.96
13				
14			86.80	Total Revenue Lag Days
			49.00	Staff's Revenue Lag Days
1	REVENUE LAG CEDAR HILL			
2				
3				
4	15.52	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.14	Staff's Calculation	
7				
8			37,250.20	37,250.20
9			295,295.73	347,812.00 Staff's Annualized Revenues
10			809.03	952.91
11	Avg. No. Days of Revenue Receivable/			
12			46.04	39.09 6.95
			Staff's Proposed Reduction 50%	0.50
			Adjusted Collection Lag Day	19.55
13				
14			65.70	Total Revenue Lag Days
			38.89	Staff's Revenue Lag Days

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG JEFFERSON CITY			
2				
3				
4	14.98	disallowed by Staff		
5				
	15.21	Staff's Service Lag		
6		6.69		Staff's Calculation
7				
8			286,092.84	286,092.84
9			5,320,009.00	6,259,774.99 Staff's Annualized Revenues
10			14,575.37	17,150.07
11	Avg. No. Days of Revenue Receivable/			
12			19.63	16.68 2.95
13	Collection Lag Days			
14			41.30	
			38.58	
	Staff's Revenue Lag Days			
1	REVENUE LAG JOPLIN			
2				
3				
4	14.72	disallowed by Staff		
5				
	15.21	Staff's Service Lag		
6		4.45		Staff's Calculation
7				
8			953,193.23	953,193.23
9			14,121,312.00	17,101,372.94 Staff's Annualized Revenues
10			38,688.53	46,853.08
11	Avg. No. Days of Revenue Receivable/			
12			24.64	20.34 4.29
13	Collection Lag Days			
14			43.81	
			40.00	
	Staff's Revenue Lag Days			

Line No.	Days	Days	Days	Variance In Collection Lag Days
1	REVENUE LAG MEXICO			
2				
3				
4	14.83	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.40	Staff's Calculation	
7				
8			232,025.67	232,025.67
9			3,252,723.00	3,497,954.80 Staff's annualized revenues
10			8,911.57	9,583.44
11				
12			26.04	24.21 1.83
13				
14			45.27	
			Staff's Revenue Lag Days	43.82
1	REVENUE LAG PARKVILLE			
2				
3				
4	14.78	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.41	Staff's Calculation	
7				
8			210,054.25	210,054.25
9			3,909,649.22	4,923,570.00 Staff Annualized Revenues
10			10,711.37	13,489.23
11				
12			19.61	15.57 4.04
13				
14			38.80	
			Staff's Revenue Lag Days	35.19
				4,859,449.00 same
				64,121.00 changed
				4,923,570.00

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG ST. JOSEPH			
2				
3				
4	14.81	disallowed by Staff		
5	15.21			
6		4.44	Staff's Calculation	
7				
8			1,219,994.09	1,219,994.09
9			20,177,437.00	21,363,520.43 Staff's Annualized Revenues
10			55,280.65	58,530.19
11	Avg. No. Days of Revenue Receivable/			
12			22.07	20.84 1.23
13				
14			41.33	
			Staff's Revenue Lag Days	40.50
1	REVENUE LAG WARREN CITY			
2				
3				
4	15.02			
5				
6		4.92	Staff's Calculation	
7				
8			24,226.29	24,226.29
9			385,408.05	335,552.34 Staff's Annualized Revenues
10			1,055.91	919.32
11	Avg. No. Days of Revenue Receivable/			
12			22.94	26.35 (3.41)
13				
14			42.88	
			Staff's Revenue Lag Days	46.29

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG WARRENSBURG			
2				
3				
4	Service Lag	14.54	disallowed by Staff	
5	Staff's Service Lag	15.21		
6	Billing Lag	4.37		Staff's Calculation
7				
8	Avg. Daily Balance Accts. Receivable		189,399.42	189,399.42
9	Total Annual Revenues		3,342,454.00	3,836,991.62
10	Average Daily Revenues		9,157.41	10,512.31
11	Avg. No. Days of Revenue Receivable/ Collection Lag Days		20.68	18.02
12				2.67
13				
14	Total Revenue Lag Days		39.60	
	Staff's Revenue Lag Days		37.60	

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
Staff's Annualized Results													
Labor	117,898.00	911,723.00	1,495,420.00	327,774.00	264,273.00	5,787.00	1,793,695.00	17,682,475.00	40,969.00	129,092.00	280,508.00	109,659.00	23,159,273.00
Tax Withholding	12,720.00	331,377.00	703,967.00	145,925.00	130,591.00	18,877.00	907,648.00	11,265,669.00	9,888.00	70,561.00	186,752.00	14,586.00	13,798,561.00
Pensions & OPEB's	71,003.00	556,952.00	121,206.00	188,496.00	32,128.00	2,234.00	627,600.00	6,523,271.00	57,303.00	83,116.00	152,809.00	37,206.00	8,453,324.00
Group Insurance	12,658.00	106,763.00	225,012.00	41,769.00	33,616.00	849.00	249,103.00	3,164,353.00	2,231.00	2,396.00	43,713.00	9,971.00	3,892,434.00
401K Withheld	3,671.00	15,703.00	32,781.00	5,436.00	3,690.00	1,732.00	23,027.00	406,805.00	721.00	1,723.00	5,813.00	386.00	501,488.00
Fuel & Power	15,490.00	239,483.00	913,043.00	204,643.00	226,329.00	-	870,015.00	6,847,300.00	6,173.00	15,255.00	201,193.00	25,011.00	9,563,935.00
Chemicals	8,366.00	351,131.00	629,552.00	75,338.00	136,927.00	-	918,866.00	10,661,815.00	2,530.00	-	38,560.00	-	12,823,085.00
Rents	-	32,153.00	80,513.00	13,480.00	12,074.00	173.00	97,369.00	775,924.00	1,223.00	3,855.00	1,223.00	-	1,017,987.00
Management Fees	-	581,226.00	1,355,720.00	249,171.00	286,916.00	-	1,876,707.00	21,672,947.00	3,251.00	16,497.00	368,230.00	29,332.00	26,439,997.00
Uncollectibles	2,618.00	56,357.00	193,194.00	23,286.00	22,698.00	220.00	199,129.00	1,482,193.00	1,597.00	1,809.00	32,043.00	3,670.00	2,018,814.00
PSC Assessment	2,417.00	43,614.00	119,150.00	24,371.00	33,857.00	3,549.00	119,150.00	1,110,055.00	1,648.00	9,846.00	26,733.00	33,801.00	1,528,291.00
Insurance Other	23,824.00	193,578.00	330,784.00	69,798.00	58,140.00	1,216.00	354,469.00	3,884,598.00	8,655.00	26,922.00	58,384.00	22,647.00	5,033,015.00
Purchased Water	-	-	-	-	133,780.00	-	-	211,597.00	-	-	-	-	345,377.00
Cash Vouchers	-	-	-	-	289,744.00	30,796.00	1,285,455.00	(170,269.00)	46,493.00	(3,831.00)	33,828.00	46,140.00	3,879,081.00
ESOP	132,670.00	743,732.00	1,165,736.00	278,587.00	289,744.00	30,796.00	1,285,455.00	(170,269.00)	46,493.00	(3,831.00)	33,828.00	46,140.00	3,879,081.00
	403,335.00	4,163,792.00	7,366,078.00	1,648,074.00	1,664,763.00	65,433.00	9,322,233.00	85,518,733.00	182,682.00	357,241.00	1,429,789.00	332,409.00	112,454,562.00
FICA - Employer Portion	8,509.00	65,941.00	120,572.00	24,513.00	18,511.00	411.00	135,984.00	1,193,610.00	2,956.00	8,826.00	21,201.00	8,170.00	1,609,204.00
Unemployment Tax	426.00	3,637.00	7,167.00	1,368.00	1,207.00	22.00	8,047.00	64,311.00	159.00	476.00	1,392.00	438.00	88,650.00
Property Taxes	26,649.00	349,313.00	1,140,952.00	190,887.00	765,248.00	-	1,025,824.00	9,308,182.00	149,697.00	-	245,525.00	-	13,202,277.00
Franchise Tax	867.00	8,103.00	40,708.00	6,919.00	12,538.00	18.00	37,305.00	291,263.00	463.00	1,258.00	7,411.00	137.00	406,990.00
	36,451.00	426,994.00	1,309,399.00	223,687.00	797,504.00	451.00	1,207,160.00	10,857,366.00	153,275.00	10,560.00	275,529.00	8,745.00	15,307,121.00
Federal Income Tax	13,684.00	137,852.00	1,382,868.00	179,693.00	333,363.00	2.00	686,050.00	5,046,648.00	4,987.00	36,888.00	173,927.00	-	7,995,962.00
State Income Tax	4,526.00	21,663.00	225,055.00	29,244.00	54,253.00	1.00	111,651.00	812,092.00	2,050.00	7,991.00	28,306.00	-	1,296,832.00
Interest Expense	54,642.00	448,737.00	2,521,160.00	438,285.00	785,907.00	914.00	2,586,652.00	17,414,888.00	36,895.00	100,219.00	502,892.00	5,656.00	24,896,847.00
	72,852.00	608,252.00	4,129,083.00	647,222.00	1,173,523.00	917.00	3,384,353.00	23,273,628.00	43,932.00	145,098.00	705,125.00	5,656.00	34,189,641.00

MAWC - Revenue (Lead)/Lag

Labor	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Tax Withholding	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Pensions & OPEB's	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Group Insurance	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
401K Withheld	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Fuel & Power	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Chemicals	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Rents	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Management Fees	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Uncollectibles	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
PSC Assessment	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Insurance Other	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Purchased Water	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Cash Vouchers	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
ESOP	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
FICA - Employer Portion	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Unemployment Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Property Taxes	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Franchise Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Federal Income Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
State Income Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Interest Expense	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
MO PSC - Revenue (Lead)/Lag													
Labor	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Tax Withholding	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Pensions & OPEB's	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Group Insurance	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
401K Withheld	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Fuel & Power	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Chemicals	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Rents	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Management Fees	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Uncollectibles	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
PSC Assessment	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Insurance Other	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Purchased Water	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Cash Vouchers	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
ESOP	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
FICA - Employer Portion	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Unemployment Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Property Taxes	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Franchise Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Federal Income Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
State Income Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Interest Expense	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Calculation of Impact relating to Revenue (Lead)/Lag variance (Staff's Annualized Results multiplied by the difference of Mo PSC & MAWC Net(Lead)/Lag) multiplied by the Average daily cash balance)													
Labor	12,219.40	6,844.17	16,797.87	1,302.12	2,613.77	57.24	3,882.24	299,875.40	257.04	(1,206.04)	1,544.72	7,949.53	352,137.44
Tax Withholding	1,318.35	2,487.60	7,907.57	579.70	1,291.60	186.70	1,964.50	191,053.40	62.04	(659.21)	1,028.42	1,057.39	208,278.05
Pensions & OPEB's	7,359.02	4,180.95	1,361.49	748.82	317.76	22.10	1,358.37	110,627.53	359.52	(776.51)	841.50	2,697.18	129,097.72
Group Insurance	1,311.92	801.45	2,527.53	165.93	332.48	8.40	539.15	53,663.96	14.00	(22.38)	240.72	722.83	60,305.99
401K Withheld	380.48	117.88	368.22	21.60	36.50	17.13	49.84	6,898.97	4.52	(16.10)	32.01	27.98	7,939.03
Fuel & Power	1,605.44	1,797.76	10,256.10	812.97	2,238.49	-	1,883.05	116,122.70	38.73	(142.52)	1,107.94	1,813.13	137,533.78
Chemicals	867.08	2,635.89	7,071.68	299.29	1,354.26	-	1,988.78	180,812.70	15.87	-	212.34	-	195,257.90
Rents	-	241.37	904.39	53.55	119.42	1.71	210.74	13,158.82	7.67	(36.02)	6.73	-	14,668.40
Management Fees	-	4,363.18	15,228.64	989.86	2,837.72	-	4,061.91	367,549.43	20.40	(154.12)	2,027.79	2,126.37	399,051.16
Uncollectibles	271.34	423.06	2,170.12	92.51	224.49	2.18	430.99	25,136.37	10.02	(16.90)	176.46	266.05	29,186.69
PSC Assessment	250.51	327.40	1,338.40	96.82	334.86	35.10	257.89	18,825.32	10.34	(91.99)	147.21	2,450.34	23,982.20
Insurance Other	2,469.21	1,453.16	3,715.66	277.28	575.03	12.03	767.21	65,878.52	54.30	(251.52)	321.51	1,641.75	76,914.14
Purchased Water	-	-	-	-	1,323.14	-	-	3,588.45	-	-	-	-	4,911.59
Cash Vouchers	13,750.43	5,583.08	13,094.57	1,106.72	2,865.69	304.59	2,782.22	(2,887.58)	291.70	35.79	186.29	3,344.83	40,458.32
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	881.91	495.01	1,354.37	97.38	183.08	4.06	294.32	20,242.32	18.55	(82.46)	116.75	592.27	24,197.56
Unemployment Tax	44.15	27.30	80.51	5.43	11.94	0.22	17.42	1,090.64	1.00	(4.45)	7.67	31.75	1,313.58
Property Taxes	2,762.00	2,622.24	12,816.17	758.32	7,568.62	-	2,220.28	157,856.57	939.19	-	1,352.07	-	188,895.46
Franchise Tax	89.86	60.83	457.27	27.49	124.01	0.18	80.74	4,939.50	2.90	(11.75)	40.81	9.93	5,821.76
Federal Income Tax	1,418.26	1,034.83	15,533.59	713.85	3,297.10	0.02	1,484.88	85,585.62	31.29	(344.62)	957.79	-	109,712.60
State Income Tax	469.09	162.62	2,528.02	116.17	536.58	0.01	241.66	13,772.19	12.86	(74.66)	155.88	-	17,920.43
Interest Expense	5,663.31	3,368.60	28,319.88	1,741.13	7,772.94	9.04	5,598.51	295,337.42	231.48	(936.29)	2,769.35	410.02	350,285.38
	<u>47,468.46</u>	<u>35,659.79</u>	<u>115,512.16</u>	<u>8,265.79</u>	<u>28,186.51</u>	<u>651.65</u>	<u>24,516.18</u>	<u>1,733,790.83</u>	<u>2,151.93</u>	<u>(3,855.45)</u>	<u>10,504.60</u>	<u>24,731.33</u>	<u>2,027,583.79</u>

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
MAWC - Expense (Lead)/Lag													
Labor	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Tax Withholding	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	
Pensions & OPEB's	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	
Group Insurance	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	
401K Withheld	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	
Fuel & Power	28.47	24.26	24.60	24.99	27.10	27.10	27.90	28.04	30.20	30.20	32.79	20.52	
Chemicals	13.58	13.64	13.73	7.14	13.78	13.78	13.01	15.58	13.66	13.66	22.28	13.58	
Rents		41.27	(4.57)	43.82	(127.50)	(127.50)	(10.71)	(4.00)	46.29	46.29	(16.41)		
Management Fees	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	
Uncollectibles													
PSC Assessment	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	
Insurance Other	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	
Purchased Water					35.68	35.68		33.82					
Cash Vouchers	18.86	30.04	17.61	14.80	25.56	25.56	23.69	21.08	43.30	43.30	20.25	26.05	
ESOP					35.19	35.19		42.25					
FICA - Employer Portion													
Unemployment Tax	0.63	0.65	0.80	0.79	0.78	0.78	0.80	0.71	0.63	0.63	1.44	0.61	
Property Taxes	175.50	175.50	170.62	175.50	175.50	175.50	174.35	178.77	159.50	159.50	175.50		
Franchise Tax	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	
Federal Income Tax													
State Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	
Interest Expense	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	
MO PSC - Expense (Lead)/Lag													
Labor	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Tax Withholding	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Pensions & OPEB's	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	
Group Insurance	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	
401K Withheld	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	
Fuel & Power	28.47	24.26	24.60	24.99	27.10	27.10	27.90	28.04	30.20	30.20	32.79	20.52	
Chemicals	13.58	13.64	13.73	7.14	13.78	13.78	13.01	15.58	13.66	13.66	22.28	13.58	
Rents		41.27	(4.57)	43.82	(127.50)	(127.50)	(10.71)	(4.00)	40.59	40.59	(16.41)		
Management Fees	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	
Uncollectibles													
PSC Assessment	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	
Insurance Other	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	
Purchased Water					35.68	35.68		33.82					
Cash Vouchers	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	
ESOP					35.19	35.19		42.25					
FICA - Employer Portion													
Unemployment Tax	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Property Taxes	175.50	174.50	170.62	175.50	175.50	175.50	174.35	178.77	159.50	159.50	175.50		
Franchise Tax	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	
Federal Income Tax													
State Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	
Interest Expense	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
Calculation of Impact relating to Expense (Lead)/Lag variance (Staff's Annualized Results multiplied by the difference of Mo PSC & MAWC Net(Lead)/Lag) multiplied by the Average daily cash balance													
Labor	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax Withholding	(121.97)	(3,177.59)	(3,741.63)	(787.60)	(669.06)	(96.71)	(4,699.88)	(57,408.61)	(51.47)	(367.30)	(1,038.65)	(139.87)	(72,300.34)
Pensions & OPEB's	-	-	-	-	-	-	-	-	-	-	-	-	-
Group Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-
401K Withheld	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel & Power	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-	-	-	-	-
Rents	-	-	-	-	-	-	-	-	(19.10)	(60.20)	-	-	(79.30)
Management Fees	-	55,686.23	129,889.12	23,872.63	27,488.91	-	179,803.96	2,076,446.46	311.47	1,580.55	35,279.46	2,810.25	2,533,169.03
Uncollectibles	-	-	-	-	-	-	-	-	-	-	-	-	-
PSC Assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchased Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash Vouchers	1,864.65	(12,327.61)	20,376.43	7,014.29	(1,246.30)	(132.46)	1,056.54	(1,357.49)	(2,459.67)	202.68	346.62	(260.41)	13,077.26
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	27.97	224.02	961.27	192.75	151.13	3.36	1,102.77	9,516.18	23.00	68.67	135.92	27.08	12,434.13
Unemployment Tax	13.27	113.10	250.55	47.75	42.49	0.77	282.42	2,278.20	5.65	16.91	45.88	13.67	3,110.66
Property Taxes	-	(957.02)	-	-	-	-	-	-	-	-	-	-	(957.02)
Franchise Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
State Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,783.92	39,561.12	147,735.74	30,339.82	25,767.18	(225.05)	177,545.81	2,029,474.73	(2,190.12)	1,441.31	34,769.23	2,450.73	2,488,454.41
Total impact to Rate Base	49,252.38	75,220.91	263,247.90	38,605.60	53,953.70	426.60	202,061.99	3,763,265.56	(38.18)	(2,414.14)	45,273.83	27,182.05	4,516,038.20
Cash Working Capital													
MO PSC Cash Working Capital													
Labor	11,951.30	66,343.46	107,137.62	27,200.75	15,610.21	341.83	132,340.29	2,449,386.13	3,029.46	11,561.69	18,536.58	8,183.87	2,851,623.20
Tax Withholding	1,289.42	24,113.35	50,434.90	12,109.78	7,713.81	1,115.04	66,967.02	1,560,526.64	731.17	6,319.56	12,340.98	1,088.56	1,744,750.22
Pensions & OPEB's	9,802.30	60,959.54	13,648.13	23,347.68	3,219.84	223.89	72,096.62	1,172,222.86	6,590.63	10,857.45	16,319.16	4,141.59	1,393,429.71
Group Insurance	2,024.59	14,022.52	30,262.57	6,087.97	4,104.84	103.67	34,069.10	637,898.89	305.43	365.44	5,625.20	1,328.19	736,198.41
401K Withheld	316.81	906.04	1,994.70	391.99	178.84	83.94	1,453.54	52,048.75	45.61	135.90	319.95	22.99	57,899.07
Fuel & Power	871.26	9,382.48	37,797.48	10,557.34	5,016.44	-	30,128.74	678,351.69	175.72	672.47	2,645.83	1,282.76	776,882.21
Chemicals	811.85	23,973.11	44,810.30	7,570.95	8,031.80	-	69,305.15	1,420,212.18	186.67	-	1,617.41	-	1,576,519.42
Rents	-	(238.73)	9,767.44	-	5,381.70	77.11	13,671.67	144,980.87	-	60.20	180.94	-	173,881.20
Management Fees	-	23,201.27	58,388.82	13,537.15	8,804.00	-	85,094.52	2,387,586.85	147.85	1,007.90	13,720.35	1,225.52	2,592,714.22
Uncollectibles	351.46	5,953.77	21,018.45	2,795.60	2,188.34	21.21	22,116.96	260,703.54	177.60	229.42	3,299.99	394.55	319,250.87
PSC Assessment	622.46	9,984.62	27,652.59	5,930.50	7,438.34	779.71	27,923.54	332,104.13	386.44	2,462.58	6,048.98	7,801.09	429,134.97
Insurance Other	5,348.32	37,920.07	65,839.61	14,678.62	10,852.27	226.98	71,359.95	1,033,835.20	1,743.57	5,843.92	11,281.71	4,478.52	1,263,408.74
Purchased Water	-	-	-	-	(179.60)	-	-	17,611.83	-	-	-	-	17,432.23
Cash Vouchers	9,090.62	29,688.15	50,206.49	15,135.29	8,890.77	944.97	58,285.70	(18,757.58)	2,114.48	(234.06)	1,260.44	1,927.77	158,553.05
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	862.56	4,798.34	8,638.24	2,034.24	1,093.42	24.28	10,033.01	165,339.51	218.58	790.47	1,401.01	609.73	195,843.38
Unemployment Tax	43.18	264.65	513.47	113.53	71.30	1.30	593.71	8,908.39	11.76	42.63	91.99	32.69	10,688.60
Property Taxes	(9,235.89)	(130,097.56)	(409,211.03)	(68,865.75)	(294,169.72)	-	(376,069.89)	(2,921,749.07)	(48,768.41)	-	(92,768.09)	-	(4,350,935.41)
Franchise Tax	46.01	198.25	1,124.21	268.99	190.99	0.27	1,115.06	27,586.20	13.90	57.42	161.62	3.61	30,766.53
Federal Income Tax	725.81	3,368.88	38,152.00	6,980.95	5,068.94	0.03	20,487.52	477,841.52	149.61	1,682.70	3,788.27	-	558,246.24

State Income Tax
Interest Expense

BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
240.06	529.41	6,209.05	1,136.11	824.94	0.02	3,334.24	76,892.88	61.50	364.52	616.53	-	90,209.25
(6,287.57)	(64,470.60)	(354,274.78)	(56,652.84)	(120,168.41)	(139.75)	(357,595.78)	(1,278,682.19)	(5,095.55)	(12,276.14)	(73,587.57)	(802.07)	(2,330,033.25)
<u>28,874.57</u>	<u>120,801.02</u>	<u>(189,889.73)</u>	<u>24,358.84</u>	<u>(319,836.94)</u>	<u>3,804.49</u>	<u>(13,289.32)</u>	<u>8,684,849.21</u>	<u>(37,773.99)</u>	<u>29,944.08</u>	<u>(67,098.71)</u>	<u>31,719.34</u>	<u>8,296,462.86</u>

(Sample Size) # Rows of Routes Read information	SLC Percent	% Weighted	Service Lag	Billing Lag	Service Lag	Billing Lag	Weighting	
Residential 1	668,187	46.88%	42.19%	42.90476	6.017428	20.11205142	2.820732	90.00%
Residential 2	652,878	45.80%	41.22%	44.69978	5.571633	20.47341525	2.551922	90.00%
Non Residential	104,369	7.32%	6.59%	37.96504	8.15411	2.779766324	0.597037	90.00%
St Louis County	1,425,434	100.00%	90.00%					
St Charles	361,074					14.97	4.56	10.00%
Total SLM	1,786,508							
				Average		58.335233	10.52969	

Weighted Service Lag	Weighted Billing Lag
39.02871	5.372722
1.497	0.456
40.53	5.83

Missouri American Water Company
 Test Year Ended 06/30/09
 Lead/Lag Study

Line No.		Days	Days	Days
1	REVENUE LAG ST. LOUIS			
2				
3				
4	Service Lag	40.53		
5				
6	Billing Lag		5.83	
7				
8	Avg. Daily Balance Accts. Receivable			\$ 9,444,886
9	Total Annual Revenues			143,428,470
10	Average Daily Revenues			392,955
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days			24.04
13				
14	Total Revenue Lag Days			70.39

Line No.	Days	Days	Days	Staff & MAWC Variance in Collection Lag Days
1	REVENUE LAG BRUNSWICK			
2				
3				
4	14.70	disallowed by staff		
5	15.21	Staff's Service Lag		
6		4.82	Staff's Calculation	
7				
8	Avg. Daily Balance Accts. Receivable		55,050.59	55,050.59
9	Total Annual Revenues		298,661.00	346,907.48 Staff's Annualized Revenues
10	Average Daily Revenues		818.25	950.43
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days		67.28	57.92 9.36
	Staff's Proposed Reduction 50%			0.50
	Adjusted Collection Lag Day			28.96
13				
14	Total Revenue Lag Days		86.80	
	Staff's Revenue Lag Days		49.00	
1	REVENUE LAG CEDAR HILL			
2				
3				
4	15.52	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.14	Staff's Calculation	
7				
8	Avg. Daily Balance Accts. Receivable		37,250.20	37,250.20
9	Total Annual Revenues		295,295.73	347,812.00 Staff's Annualized Revenues
10	Average Daily Revenues		809.03	952.91
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days		46.04	39.09 6.95
	Staff's Proposed Reduction 50%			0.50
	Adjusted Collection Lag Day			19.55
13				
14	Total Revenue Lag Days		65.70	
	Staff's Revenue Lag Days		38.89	

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG JEFFERSON CITY			
2				
3				
4	14.98	disallowed by Staff		
5				
	15.21	Staff's Service Lag		
6		6.69		Staff's Calculation
7				
8			286,092.84	286,092.84
9			5,320,009.00	6,259,774.99 Staff's Annualized Revenues
10			14,575.37	17,150.07
11				
12			19.63	16.68
13				2.95
14			41.30	
			38.58	
1	REVENUE LAG JOPLIN			
2				
3				
4	14.72	disallowed by Staff		
5				
	15.21	Staff's Service Lag		
6		4.45		Staff's Calculation
7				
8			953,193.23	953,193.23
9			14,121,312.00	17,101,372.94 Staff's Annualized Revenues
10			38,688.53	46,853.08
11				
12			24.64	20.34
13				4.29
14			43.81	
			40.00	

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG MEXICO			
2				
3				
4	Service Lag	14.83	disallowed by Staff	
5	Staff's Service Lag	15.21		
6	Billing Lag		4.40	Staff's Calculation
7				
8	Avg. Daily Balance Accts. Receivable		232,025.67	232,025.67
9	Total Annual Revenues		3,252,723.00	3,497,954.80 Staff's annualized revenues
10	Average Daily Revenues		8,911.57	9,583.44
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days		26.04	24.21 1.83
13				
14	Total Revenue Lag Days		45.27	
	Staff's Revenue Lag Days		43.82	
1	REVENUE LAG PARKVILLE			
2				
3				
4	Service Lag	14.78	disallowed by Staff	
5	Staff's Service Lag	15.21		
6	Billing Lag		4.41	Staff's Calculation
7				
8	Avg. Daily Balance Accts. Receivable		210,054.25	210,054.25
9	Total Annual Revenues		3,909,649.22	4,923,570.00 Staff Annualized Revenues
10	Average Daily Revenues		10,711.37	13,489.23
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days		19.61	15.57 4.04
13				
14	Total Revenue Lag Days		38.80	
	Staff's Revenue Lag Days		35.19	
			4,859,449.00	same
			64,121.00	changed
			4,923,570.00	

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG ST. JOSEPH			
2				
3				
4	14.81	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.44	Staff's Calculation	
7				
8			1,219,994.09	1,219,994.09
9			20,177,437.00	21,363,520.43 Staff's Annualized Revenues
10			55,280.65	58,530.19
11				
12			22.07	20.84 1.23
13				
14			41.33	
			Staff's Revenue Lag Days	40.50
1	REVENUE LAG WARREN CITY			
2				
3				
4	15.02	Service Lag		
5				
6		4.92	Staff's Calculation	
7				
8			24,226.29	24,226.29
9			385,408.05	335,552.34 Staff's Annualized Revenues
10			1,055.91	919.32
11				
12			22.94	26.35 (3.41)
13				
14			42.88	
			Staff's Revenue Lag Days	46.29

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG WARRENSBURG			
2				
3				
4	Service Lag	14.54	disallowed by Staff	
5	Staff's Service Lag	15.21		
6	Billing Lag	4.37		Staff's Calculation
7				
8	Avg. Daily Balance Accts. Receivable		189,399.42	189,399.42
9	Total Annual Revenues		3,342,454.00	3,836,991.62 Staff's Annualized Revenues
10	Average Daily Revenues		9,157.41	10,512.31
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days		20.68	18.02
13				2.67
14	Total Revenue Lag Days		39.60	
	Staff's Revenue Lag Days		37.60	

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
Staff's Annualized Results													
Labor	117,898.00	911,723.00	1,495,420.00	327,774.00	264,273.00	5,787.00	1,793,695.00	17,682,475.00	40,969.00	129,092.00	280,508.00	109,659.00	23,159,273.00
Tax Withholding	12,720.00	331,377.00	703,967.00	145,925.00	130,591.00	18,877.00	907,648.00	11,265,669.00	9,888.00	70,561.00	186,752.00	14,586.00	13,798,561.00
Pensions & OPEB's	71,003.00	556,952.00	121,206.00	188,496.00	32,128.00	2,234.00	627,600.00	6,523,271.00	57,303.00	83,116.00	152,809.00	37,206.00	8,453,324.00
Group Insurance	12,658.00	106,763.00	225,012.00	41,769.00	33,616.00	849.00	249,103.00	3,164,353.00	2,231.00	2,396.00	43,713.00	9,971.00	3,892,434.00
401K Withheld	3,671.00	15,703.00	32,781.00	5,436.00	3,690.00	1,732.00	23,027.00	406,805.00	721.00	1,723.00	5,813.00	386.00	501,488.00
Fuel & Power	15,490.00	239,483.00	913,043.00	204,643.00	226,329.00	-	870,015.00	6,847,300.00	6,173.00	15,255.00	201,193.00	25,011.00	9,563,935.00
Chemicals	8,366.00	351,131.00	629,552.00	75,338.00	136,927.00	-	918,866.00	10,661,815.00	2,530.00	-	38,560.00	-	12,823,085.00
Rents	-	32,153.00	80,513.00	13,480.00	12,074.00	173.00	97,369.00	775,924.00	1,223.00	3,855.00	1,223.00	-	1,017,987.00
Management Fees	-	581,226.00	1,355,720.00	249,171.00	286,916.00	-	1,876,707.00	21,672,947.00	3,251.00	16,497.00	368,230.00	29,332.00	26,439,997.00
Uncollectibles	2,618.00	56,357.00	193,194.00	23,286.00	22,698.00	220.00	199,129.00	1,482,193.00	1,597.00	1,809.00	32,043.00	3,670.00	2,018,814.00
PSC Assessment	2,417.00	43,614.00	119,150.00	24,371.00	33,857.00	3,549.00	119,150.00	1,110,055.00	1,648.00	9,846.00	26,733.00	33,801.00	1,528,191.00
Insurance Other	23,824.00	193,578.00	330,784.00	69,798.00	58,140.00	1,216.00	354,469.00	3,884,598.00	8,655.00	26,922.00	58,384.00	22,647.00	5,033,015.00
Purchased Water	-	-	-	-	133,780.00	-	-	211,597.00	-	-	-	-	345,377.00
Cash Vouchers	132,670.00	743,732.00	1,165,736.00	278,587.00	289,744.00	30,796.00	1,285,455.00	(170,269.00)	46,493.00	(3,831.00)	33,828.00	46,140.00	3,879,081.00
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
	403,335.00	4,163,792.00	7,366,078.00	1,648,074.00	1,664,763.00	65,433.00	9,322,233.00	85,518,733.00	182,682.00	357,241.00	1,429,789.00	332,409.00	112,454,562.00
FICA - Employer Portion	8,509.00	65,941.00	120,572.00	24,513.00	18,511.00	411.00	135,984.00	1,193,610.00	2,956.00	8,826.00	21,201.00	8,170.00	1,609,204.00
Unemployment Tax	426.00	3,637.00	7,167.00	1,368.00	1,207.00	22.00	8,047.00	64,311.00	159.00	476.00	1,392.00	438.00	88,650.00
Property Taxes	26,649.00	349,313.00	1,140,952.00	190,887.00	765,248.00	-	1,025,824.00	9,308,182.00	149,697.00	-	245,525.00	-	13,202,277.00
Franchise Tax	867.00	8,103.00	40,708.00	6,919.00	12,538.00	18.00	37,305.00	291,263.00	463.00	1,258.00	7,411.00	137.00	406,990.00
	36,451.00	426,994.00	1,309,399.00	223,687.00	797,504.00	451.00	1,207,160.00	10,857,366.00	153,275.00	10,560.00	275,529.00	8,745.00	15,307,121.00
Federal Income Tax	13,684.00	137,852.00	1,382,868.00	179,693.00	333,363.00	2.00	686,050.00	5,046,648.00	4,987.00	36,888.00	173,927.00	-	7,995,962.00
State Income Tax	4,526.00	21,663.00	225,055.00	29,244.00	54,253.00	1.00	111,651.00	812,092.00	7,050.00	7,991.00	28,306.00	-	1,296,832.00
Interest Expense	54,642.00	448,737.00	2,521,160.00	438,285.00	785,907.00	914.00	2,586,652.00	17,414,888.00	36,895.00	100,219.00	502,892.00	5,656.00	24,896,847.00
	72,852.00	608,252.00	4,129,083.00	647,222.00	1,173,523.00	917.00	3,384,353.00	23,273,628.00	43,932.00	145,098.00	705,125.00	5,656.00	34,189,641.00

MAWC - Revenue (Lead)/Lag

Labor	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Tax Withholding	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Pensions & OPEB's	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Group Insurance	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
401K Withheld	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Fuel & Power	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Chemicals	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Rents	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Management Fees	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Uncollectibles	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
PSC Assessment	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Insurance Other	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Purchased Water	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Cash Vouchers	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
ESOP	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
FICA - Employer Portion	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Unemployment Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Property Taxes	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Franchise Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Federal Income Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
State Income Tax	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70
Interest Expense	86.83	41.30	43.81	45.27	38.80	38.80	41.33	70.39	42.88	42.88	39.60	65.70

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
MO PSC - Revenue (Lead)/Lag													
Labor	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Tax Withholding	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Pensions & OPEB's	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Group Insurance	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
401K Withheld	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Fuel & Power	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Chemicals	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Rents	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Management Fees	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Uncollectibles	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
PSC Assessment	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Insurance Other	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Purchased Water	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Cash Vouchers	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
ESOP	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
FICA - Employer Portion													
Unemployment Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Property Taxes	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Franchise Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Federal Income Tax													
State Income Tax	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Interest Expense	49.00	38.56	39.71	43.82	35.19	35.19	40.54	64.20	40.59	46.29	37.59	39.24	
Calculation of Impact relating to Revenue (Lead)/Lag variance (Staff's Annualized Results multiplied by the difference of Mo PSC & MAWC Net(Lead)/Lag) multiplied by the Average daily cash balance													
Labor	12,219.40	6,844.17	16,797.87	1,302.12	2,613.77	57.24	3,882.24	299,875.40	257.04	(1,206.04)	1,544.72	7,949.53	352,137.44
Tax Withholding	1,318.35	2,487.60	7,907.57	579.70	1,291.60	186.70	1,964.50	191,053.40	62.04	(659.21)	1,028.42	1,057.39	208,278.05
Pensions & OPEB's	7,359.02	4,180.95	1,361.49	748.82	317.76	22.10	1,358.37	110,627.53	359.52	(776.51)	841.50	2,697.18	129,097.72
Group Insurance	1,311.92	801.45	2,527.53	165.93	332.48	8.40	539.15	53,663.96	14.00	(22.38)	240.72	722.83	60,305.99
401K Withheld	380.48	117.88	368.22	21.60	36.50	17.13	49.84	6,898.97	4.52	(16.10)	32.01	27.98	7,939.03
Fuel & Power	1,605.44	1,797.76	10,256.10	812.97	2,238.49	-	1,883.05	116,122.70	38.73	(142.52)	1,107.94	1,813.13	137,533.78
Chemicals	867.08	2,635.89	7,071.68	299.29	1,354.26	-	1,988.78	180,812.70	15.87	-	212.34	-	195,257.90
Rents	-	241.37	904.39	53.55	119.42	1.71	210.74	13,158.82	7.67	(36.02)	6.73	-	14,668.40
Management Fees	-	4,363.18	15,228.64	989.86	2,837.72	-	4,061.91	367,549.43	20.40	(154.12)	2,027.79	2,126.37	399,051.16
Uncollectibles	271.34	423.06	2,170.12	92.51	224.49	2.18	430.99	25,136.37	10.02	(16.90)	176.46	266.05	29,186.69
PSC Assessment	250.51	327.40	1,338.40	96.82	334.86	35.10	257.89	18,825.32	10.34	(91.99)	147.21	2,450.34	23,982.20
Insurance Other	2,469.21	1,453.16	3,715.66	277.28	575.03	12.03	767.21	65,878.52	54.30	(251.52)	321.51	1,641.75	76,914.14
Purchased Water	-	-	-	-	1,323.14	-	-	3,588.45	-	-	-	-	4,911.59
Cash Vouchers	13,750.43	5,583.08	13,094.57	1,106.72	2,865.69	304.59	2,782.22	(2,887.58)	291.70	35.79	186.29	3,344.83	40,458.32
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion													
Unemployment Tax	881.91	495.01	1,354.37	97.38	183.08	4.06	294.32	20,242.32	18.55	(82.46)	116.75	592.27	24,197.56
Property Taxes	44.15	27.30	80.51	5.43	11.94	0.22	17.42	1,090.64	1.00	(4.45)	7.67	31.75	1,313.58
Franchise Tax	2,762.00	2,622.24	12,816.17	758.32	7,568.62	-	2,220.28	157,856.57	939.19	-	1,352.07	-	188,895.46
Interest Expense	89.86	60.83	457.27	27.49	124.01	0.18	80.74	4,939.50	2.90	(11.75)	40.81	9.93	5,821.76
Federal Income Tax													
State Income Tax	1,418.26	1,034.83	15,533.59	713.85	3,297.10	0.02	1,484.88	85,585.62	31.29	(344.62)	957.79	-	109,712.60
Interest Expense	469.09	162.62	2,528.02	116.17	536.58	0.01	241.66	13,772.19	12.86	(74.66)	155.88	-	17,920.43
Interest Expense	5,663.31	3,368.60	28,319.88	1,741.13	7,772.94	9.04	5,598.51	295,337.42	231.48	(936.29)	2,769.35	410.02	350,285.38
	47,468.46	35,659.79	115,512.16	8,265.79	28,186.51	651.65	24,516.18	1,733,790.83	2,151.93	(3,855.45)	10,504.60	24,731.33	2,027,583.79

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
MAWC - Expense (Lead)/Lag													
Labor	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Tax Withholding	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	
Pensions & OPEB's	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	
Group Insurance	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	
401K Withheld	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	
Fuel & Power	28.47	24.26	24.60	24.99	27.10	27.10	27.90	28.04	30.20	30.20	32.79	20.52	
Chemicals	13.58	13.64	13.73	7.14	13.78	13.78	13.01	15.58	13.66	13.66	22.28	13.58	
Rents		41.27	(4.57)	43.82	(127.50)	(127.50)	(10.71)	(4.00)	46.29	46.29	(16.41)		
Management Fees	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	(10.98)	
Uncollectibles													
PSC Assessment	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	
Insurance Other	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	
Purchased Water					35.68	35.68		33.82					
Cash Vouchers	18.86	30.04	17.61	14.80	25.56	25.56	23.69	21.08	43.30	43.30	20.25	26.05	
ESOP					35.19	35.19		42.25					
FICA - Employer Portion													
Unemployment Tax	0.63	0.65	0.80	0.79	0.78	0.78	0.80	0.71	0.63	0.63	1.44	0.61	
Property Taxes	175.50	175.50	170.62	175.50	175.50	175.50	174.35	178.77	159.50	159.50	175.50		
Franchise Tax	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	
Federal Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	
State Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	
Interest Expense	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	
MD PSC - Expense (Lead)/Lag													
Labor	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Tax Withholding	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Pensions & OPEB's	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	
Group Insurance	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	(9.38)	
401K Withheld	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	
Fuel & Power	28.47	24.26	24.60	24.99	27.10	27.10	27.90	28.04	30.20	30.20	32.79	20.52	
Chemicals	13.58	13.64	13.73	7.14	13.78	13.78	13.01	15.58	13.66	13.66	22.28	13.58	
Rents		41.27	(4.57)	43.82	(127.50)	(127.50)	(10.71)	(4.00)	40.59	40.59	(16.41)		
Management Fees	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	
Uncollectibles													
PSC Assessment	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	(45.00)	
Insurance Other	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	(32.94)	
Purchased Water					35.68	35.68		33.82					
Cash Vouchers	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	23.99	
ESOP					35.19	35.19		42.25					
FICA - Employer Portion													
Unemployment Tax	12.00	12.00	13.56	13.53	13.63	13.63	13.61	13.64	13.60	13.60	13.47	12.00	
Property Taxes	175.50	174.50	170.62	175.50	175.50	175.50	174.35	178.77	159.50	159.50	175.50		
Franchise Tax	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	29.63	
Federal Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	
State Income Tax	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	29.64	
Interest Expense	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	91.00	

	BRU	JFC	JOP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
Calculation of Impact relating to Expense (Lead)/Lag variance (Staff's Annualized Results multiplied by the difference of Mo PSC & MAWC Net(Lead)/Lag) multiplied by the Average daily cash balance)													
Labor	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax Withholding	(121.97)	(3,177.59)	(3,741.63)	(787.60)	(669.06)	(96.71)	(4,699.88)	(57,408.61)	(51.47)	(367.30)	(1,038.65)	(139.87)	(72,300.34)
Pensions & OPEB's	-	-	-	-	-	-	-	-	-	-	-	-	-
Group Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-
401K Withheld	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel & Power	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemicals	-	-	-	-	-	-	-	-	-	-	-	-	-
Rents	-	-	-	-	-	-	-	-	(19.10)	(60.20)	-	-	(79.30)
Management Fees	-	55,686.23	129,889.12	23,872.63	27,488.91	-	179,803.96	2,076,446.46	311.47	1,580.55	35,279.46	2,810.25	2,533,169.03
Uncollectibles	-	-	-	-	-	-	-	-	-	-	-	-	-
PSC Assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchased Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash Vouchers	1,864.65	(12,327.61)	20,376.43	7,014.29	(1,246.30)	(132.46)	1,056.54	(1,357.49)	(2,459.67)	202.68	346.62	(260.41)	13,077.26
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	27.97	224.02	961.27	192.75	151.13	3.36	1,102.77	9,516.18	23.00	68.67	135.92	27.08	12,434.13
Unemployment Tax	13.27	113.10	250.55	47.75	42.49	0.77	282.42	2,278.20	5.65	16.91	45.88	13.67	3,110.66
Property Taxes	-	(957.02)	-	-	-	-	-	-	-	-	-	-	(957.02)
Franchise Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
State Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
	1,783.92	39,561.12	147,735.74	30,339.82	25,767.18	(225.05)	177,545.81	2,029,474.73	(2,190.12)	1,441.31	34,769.23	2,450.73	2,488,454.41

Total impact to Rate Base	49,252.38	75,220.91	263,247.90	38,605.60	53,953.70	426.60	202,061.99	3,763,265.56	(38.18)	(2,414.14)	45,273.83	27,182.05	4,516,038.20
Cash Working Capital													

MO PSC Cash Working Capital

Labor	11,951.30	66,343.46	107,137.62	27,200.75	15,610.21	341.83	132,340.29	2,449,386.13	3,029.46	11,561.69	18,536.58	8,183.87	2,851,623.20
Tax Withholding	1,289.42	24,113.35	50,434.90	12,109.78	7,713.81	1,115.04	66,967.02	1,560,526.64	731.17	6,319.56	12,340.98	1,088.56	1,744,750.22
Pensions & OPEB's	9,802.30	60,959.54	13,648.13	23,347.68	3,219.84	223.89	72,096.62	1,172,222.86	6,590.63	10,857.45	16,319.16	4,141.59	1,393,429.71
Group Insurance	2,024.59	14,022.52	30,262.57	6,087.97	4,104.84	103.67	34,069.10	637,898.89	305.43	365.44	5,625.20	1,328.19	736,198.41
401K Withheld	316.81	906.04	1,994.70	391.99	178.84	83.94	1,453.54	52,048.75	45.61	135.90	319.95	22.99	57,899.07
Fuel & Power	871.26	9,382.48	37,797.48	10,557.34	5,016.44	-	30,128.74	678,351.69	175.72	672.47	2,645.83	1,282.76	776,882.21
Chemicals	811.85	23,973.11	44,810.30	7,570.95	8,031.80	-	69,305.15	1,420,212.18	186.67	-	1,617.41	-	1,576,519.42
Rents	-	(238.73)	9,767.44	-	5,381.70	77.11	13,671.67	144,980.87	-	60.20	180.94	-	173,881.20
Management Fees	-	23,201.27	58,388.82	13,537.15	8,804.00	-	85,094.52	2,387,586.85	147.85	1,007.90	13,720.35	1,225.52	2,592,714.22
Uncollectibles	351.46	5,953.77	21,018.45	2,795.60	2,188.34	21.21	22,116.96	260,703.54	177.60	229.42	3,299.99	394.55	319,250.87
PSC Assessment	622.46	9,984.62	27,652.59	5,930.50	7,438.34	779.71	27,923.54	332,104.13	386.44	2,462.58	6,048.98	7,801.09	429,134.97
Insurance Other	5,348.32	37,920.07	65,839.61	14,678.62	10,852.27	226.98	71,359.95	1,033,835.20	1,743.57	5,843.92	11,281.71	4,478.52	1,263,408.74
Purchased Water	-	-	-	-	(179.60)	-	-	17,611.83	-	-	-	-	17,432.23
Cash Vouchers	9,090.62	29,688.15	50,206.49	15,135.29	8,890.77	944.97	58,285.70	(18,757.58)	2,114.48	(234.06)	1,260.44	1,927.77	158,553.05
ESOP	-	-	-	-	-	-	-	-	-	-	-	-	-
FICA - Employer Portion	862.56	4,798.34	8,638.24	2,034.24	1,093.42	24.28	10,033.01	165,339.51	218.58	790.47	1,401.01	609.73	195,843.38
Unemployment Tax	43.18	264.65	513.47	113.53	71.30	1.30	593.71	8,908.39	11.76	42.63	91.99	32.69	10,688.60
Property Taxes	(9,235.89)	(130,097.56)	(409,211.03)	(68,865.75)	(294,169.72)	-	(376,069.89)	(2,921,749.07)	(48,768.41)	-	(92,768.09)	-	(4,350,935.41)
Franchise Tax	46.01	198.25	1,124.21	268.99	190.99	0.27	1,115.06	27,586.20	13.90	57.42	161.62	3.61	30,766.53
Federal Income Tax	725.81	3,368.88	38,152.00	6,980.95	5,068.94	0.03	20,487.52	477,841.52	149.61	1,682.70	3,788.27	-	558,246.24

State Income Tax
Interest Expense

	BRU	JFC	JDP	MEX	PKW	PKS	SJO	SLM	WCW	WCS	WAR	CDH	Total
State Income Tax	240.06	529.41	6,209.05	1,136.11	824.94	0.02	3,334.24	76,892.88	61.50	364.52	616.53	-	90,209.25
Interest Expense	(6,287.57)	(64,470.60)	(354,274.78)	(56,652.84)	(120,168.41)	(139.75)	(357,595.78)	(1,278,682.19)	(5,095.55)	(12,276.14)	(73,587.57)	(802.07)	(2,330,033.25)
	<u>28,874.57</u>	<u>120,801.02</u>	<u>(189,889.73)</u>	<u>24,358.84</u>	<u>(319,836.94)</u>	<u>3,804.49</u>	<u>(13,289.32)</u>	<u>8,684,849.21</u>	<u>(37,773.99)</u>	<u>29,944.08</u>	<u>(67,098.71)</u>	<u>31,719.34</u>	<u>8,296,462.86</u>

(Sample Size) # Rows of Routes Read information	SLC Percent	% Weighted	Service Lag	Billing Lag	Service Lag	Billing Lag	Weighting	Weighted Service Lag	Weighted Billing Lag
Residential 1	668,187	46.88%	42.19%	42.90476	6.017428	20.11205142	2.820732	90.00%	
Residential 2	652,878	45.80%	41.22%	44.69978	5.571633	20.47341525	2.551922	90.00%	
Non Residential	104,369	7.32%	6.59%	37.96504	8.15411	2.779766324	0.597037	90.00%	
St Louis County	1,425,434	100.00%	90.00%						39.02871
St Charles	361,074					14.97	4.56	10.00%	1.497
Total SLM	1,786,508								
Average						58.335233	10.52969		40.53
									5.83

Missouri American Water Company
 Test Year Ended 06/30/09
 Lead/Lag Study

Line No.		Days	Days	Days
1	REVENUE LAG ST. LOUIS			
2				
3				
4	Service Lag	40.53		
5				
6	Billing Lag		5.83	
7				
8	Avg. Daily Balance Accts. Receivable			\$ 9,444,886
9	Total Annual Revenues			143,428,470
10	Average Daily Revenues			392,955
11	Avg. No. Days of Revenue Receivable/			
12	Collection Lag Days			24.04
13				
14	Total Revenue Lag Days			70.39

Line No.

Staff & MAWC
Variance in
Collection Lag Days

	Days	Days	Days		
1 REVENUE LAG BRUNSWICK					
2					
3					
4 Service Lag	14.70	disallowed by staff			
5 Staff's Service Lag	15.21				
6 Billing Lag		4.82		Staff's Calculation	
7					
8 Avg. Daily Balance Accts. Receivable			55,050.59	55,050.59	
9 Total Annual Revenues			298,661.00	346,907.48	Staff's Annualized Revenues
10 Avarage Daily Revenues			818.25	950.43	
11 Avg. No. Days of Revenue Receivalbe/					
12 Collection Lag Days			67.28	57.92	9.36
Staff's Proposed Reduction 50%				0.50	
Adjusted Collection Lag Day				28.96	
13					
14 Total Revenue Lag Days			86.80		
Staff's Revenue Lag Days			49.00		
1 REVENUE LAG CEDAR HILL					
2					
3					
4 Service Lag	15.52	disallowed by Staff			
5 Staff's Service Lag	15.21				
6 Billing Lag		4.14		Staff's Calculation	
7					
8 Avg. Daily Balance Accts. Receivable			37,250.20	37,250.20	
9 Total Annual Revenues			295,295.73	347,812.00	Staff's Annualized Revenues
10 Avarage Daily Revenues			809.03	952.91	
11 Avg. No. Days of Revenue Receivalbe/					
12 Collection Lag Days			46.04	39.09	6.95
Staff's Proposed Reduction 50%				0.50	
Adjusted Collection Lag Day				19.55	
13					
14 Total Revenue Lag Days			65.70		
Staff's Revenue Lag Days			38.89		

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG JEFFERSON CITY			
2				
3				
4	14.98	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		6.69		Staff's Calculation
7				
8			286,092.84	286,092.84
9			5,320,009.00	6,259,774.99 Staff's Annualized Revenues
10			14,575.37	17,150.07
11				
12			19.63	16.68 2.95
13				
14			41.30	
			38.58	Staff's Revenue Lag Days
1	REVENUE LAG JOPLIN			
2				
3				
4	14.72	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.45		Staff's Calculation
7				
8			953,193.23	953,193.23
9			14,121,312.00	17,101,372.94 Staff's Annualized Revenues
10			38,688.53	46,853.08
11				
12			24.64	20.34 4.29
13				
14			43.81	
			40.00	Staff's Revenue Lag Days

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG MEXICO			
2				
3				
4	14.83	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.40		Staff's Calculation
7				
8			232,025.67	232,025.67
9			3,252,723.00	3,497,954.80 Staff's annualized revenues
10			8,911.57	9,583.44
11				
12			26.04	24.21 1.83
13				
14			45.27	
			43.82	Staff's Revenue Lag Days
1	REVENUE LAG PARKVILLE			
2				
3				
4	14.78	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.41		Staff's Calculation
7				
8			210,054.25	210,054.25
9			3,909,649.22	4,923,570.00 Staff Annualized Revenues
10			10,711.37	13,489.23
11				
12			19.61	15.57 4.04
13				
14			38.80	
			35.19	Staff's Revenue Lag Days
				4,859,449.00 same
				64,121.00 changed
				4,923,570.00

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG ST. JOSEPH			
2				
3				
4	14.81	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.44		Staff's Calculation
7				
8			1,219,994.09	1,219,994.09
9			20,177,437.00	21,363,520.43 Staff's Annualized Revenues
10			55,280.65	58,530.19
11				
12			22.07	20.84 1.23
13				
14			41.33	
			40.50	Staff's Revenue Lag Days
1	REVENUE LAG WARREN CITY			
2				
3				
4	15.02	Service Lag		
5				
6		4.92		Staff's Calculation
7				
8			24,226.29	24,226.29
9			385,408.05	335,552.34 Staff's Annualized Revenues
10			1,055.91	919.32
11				
12			22.94	26.35 (3.41)
13				
14			42.88	
			46.29	Staff's Revenue Lag Days

Line No.	Days	Days	Days	Variance in Collection Lag Days
1	REVENUE LAG WARRENSBURG			
2				
3				
4	14.54	disallowed by Staff		
5	15.21	Staff's Service Lag		
6		4.37	Billing Lag	
7			Staff's Calculation	
8			189,399.42	189,399.42
9			3,342,454.00	3,836,991.62
10			9,157.41	10,512.31
11				Staff's Annualized Revenues
12			20.68	18.02
13				2.67
14			39.60	
			37.60	
			Staff's Revenue Lag Days	