Exhibit No.:

Issues: Labor and Labor Related Expenses,

Support Services, Production Costs, and

Other Operating Expense,

Witness: Nikole L. Bowen

Exhibit Type: Direct

Sponsoring Party: Missouri-American Water Company

Case No.: WR-2017-0285

SR-2017-0286

Date: June 30, 2017

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2017-0285 CASE NO. SR-2017-0286

DIRECT TESTIMONY

OF

NIKOLE L. BOWEN

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

DIRECT TESTIMONY NIKOLE L. BOWEN MISSOURI-AMERICAN WATER COMPANY CASE NO. WR-2017-0285 CASE NO. SR-2017-0286

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DIRECT TESTIMONY

NIKOLE L BOWEN

1		I. <u>INTRODUCTION</u>
2	Q.	Please state your name and business address.
3	A.	My name is Nikole L. Bowen, and my business address is 727 Craig Road, St. Louis
4		MO, 63141.
5	Q.	By whom are you employed and in what capacity?
6	A.	I am Senior Manager of Regulatory Services for American Water Works Services
7		Company, Inc. ("Service Company"). Service Company is a wholly owned subsidiary
8		of American Water Works Company, Inc. ("American Water") that provides services
9		to Missouri-American Water Company ("MAWC", "Missouri-American" or
10		"Company") and its affiliates.
11	Q.	What are your responsibilities in this position?
12	A.	My duties consist of reviewing, preparing and assisting in regulatory filings and related
13		activities for all of the regulated subsidiaries of American Water. My responsibilities
14		and my team's responsibilities include the preparation of written testimony, exhibits
15		and work papers in support of rate applications and other regulatory filings as well as
16		responses to data requests for Missouri-American and its regulated utility affiliates
17		My duties also include staying apprised of economic and regulatory developments and

conditions that may affect regulated water utilities, rates and regulatory policy analysis,

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- support and analysis, guidance and coordination of process improvement to support
- 2 continuous improvement of rates and regulatory processes and services, data
- 3 compilation and reporting, data and revenue analysis.
- 4 Q. Please describe your educational background.
- 5 A. I am a graduate of Fontbonne University in Missouri with a Bachelor of Business
- 6 Administration.
- 7 Q. What has been your business experience?
- 8 A. I began my career with American Water in 2002 at the Customer Service Center
- 9 ("CSC") in Alton IL. In 2009, I was promoted to Billing Manager, responsible for all
- facets of the revenue generation process, new business integration into the Customer
- Service Center, rates implementation, and Sarbanes Oxley Compliance for billing
- related controls. In March 2015, I joined Regulatory Services and currently hold the
- position of Senior Manager of Regulatory Services.
- 14 Q. Have you previously testified in regulatory proceedings?
- 15 A. Yes. I have assisted in the preparation of rate cases and presented testimony to the
- Missouri Public Service Commission, the Kentucky Public Service Commission, and
- the Iowa Utilities Board.
- 18 Q. Have you prepared, or caused to be prepared, exhibits in support of Missouri-
- 19 American's general rate case?
- 20 A. I have overseen preparation of exhibits and workpapers in support of this general rate
- 21 case for Missouri-American.

\mathbf{O}	What is the	nurnosa of v	your testimon	w in thi	nroceeding?
U.	what is the	purpose or v	vour testimon	IV III UIII	s proceeding:

A. The purpose of my direct testimony is to support and explain the following Company expense levels: labor and labor related, support services, production, and other operating expenses.

What methodology did the Company use in in making its pro forma adjustments to its historical expense levels in this case?

A. We employed a Future Test Year –

In general, the historical test year expenses (12 months ended December 31, 2016) were updated to include known and measurable changes, adjusted based on Company experience, or adjusted based on an inflation factor annualized, through the 12 months ending May 31, 2018 (the "current test year"). The Company then used a monthly projection for the 12 months ended May 31, 2019 (the "future test year") using known and measurable changes, adjustments based on Company experience, or adjustments based on an inflation factor.

In order to obtain representative levels of expenses that can vary, MAWC used a three-year average of Company experience for pro forma expense adjustments to labor and labor related, main break expense, chemical costs, and purchased water. To gauge cost increases, MAWC used the average Gross Domestic Product Price Index forecast as compiled by Blue Chip Economic Indicators. We applied inflation to the following pro forma expense adjustment: non-PBOP insurance expense, fuel and power, chemicals expense, rents, purchased water, transportation, postage, customer accounting, contract services, maintenance supplies and services, and insurance other than group. This

forecast is a survey of a wide range of financial professionals, including bank, academic
and corporate forecasters. As of May 2017, the 2017 GDP Price Index is 2.0% and the
3 2018 GDP Price Index is 2.1%.¹

Q. Can you provide an overview of the increased Company's O&M expense level?

A.

MAWC is seeking recovery of \$133 million in O&M expense for the future test year ending May 31, 2019, which represents about a 2.0% percent annual increase over historical expense levels. As Andrew Clarkson explains in his direct testimony, the Company is seeking to enhance its maintenance activities, including plant maintenance, valve operation, hydrant maintenance and flushing to sustain a cost effective level of service for our customers over the long term. The initiative to enhance the Company's enhanced maintenance activities, results in a pro forma expense increase of roughly 7.9 million dollars. Service Company costs are also projected to increase by \$694,000, from \$30.23 million in 2106 to \$30.93 million in for the future test year ending May 31, 2019. These cost increases are offset, in part, by the Company's ongoing cost control efforts, which kept costs approximately level from 2010 to the historical year. The Company also is projecting a \$774,670 decrease in uncollectible expense from 2016 through the future test year.

III. LABOR AND LABOR RELATED EXPENSES

19 Q. Please describe MAWC's labor and labor related expense.

¹ The Consumer Price Index (CPI) and the gross domestic product (GDP) price index and implicit price deflator are measures of inflation in the U.S. economy. The CPI measures price changes in goods and services purchased out of pocket by urban consumers, whereas the GDP price index and implicit price deflator measure price changes in goods and services purchased by consumers, businesses, government, and foreigners, but not importers. Source: United States Bureau of Labor Statistic

A. There are three classifications of employees at MAWC: union hourly employees, non-union hourly employees, and exempt employees. Union hourly employees receive base pay, overtime pay, and in some cases shift pay. Non-union hourly employees receive base pay, overtime pay, and are eligible for performance pay. Exempt employees receive base pay and are eligible for performance pay. Therefore, total compensation for each classification of employees includes fixed pay (base pay) and some form(s) of variable pay (e.g., overtime, shift pay, or performance pay). Labor related expenses include payroll tax, pension expense, postretirement benefits other than pension ("PBOP"), group insurance, 401k benefits, defined contribution plan benefits, retiree medical expense, and employee stock purchase plan. Company Witness Watkins will discuss pension expense and PBOP.

Q. Please describe how labor and labor related expense was calculated.

A.

The pro forma salaries and wages expense was calculated on a position-by-position basis, based on 696 full-time positions and 12 temporary summer positions. This means that the 2016 test year labor hours for each employee were analyzed and adjusted to reflect a normal level of labor hours. These hours were then multiplied by the employees' actual individual 2017 wage rate to determine pro forma labor costs for 2017, and inflated using a three-year average salary increase for non-union and contractual wage rates for union employees to determine current test year and future test year costs.

Because some labor and labor related costs are capitalized with capital projects and programs, labor and labor related costs are multiplied by an operations and maintenance ("O&M) percentage based on the 2016 ratio of dollars charged to

O&M versus capital to derive labor and labor related expense. This eliminates from expenses the labor and labor related costs associated with capital projects and programs, which are appropriately charged to those capital projects.

4 Q. Please explain how the various components of salaries and wages were calculated.

5 A. Salaries and wages expense is composed of four components: 1) base pay, 2) overtime 6 expense, 3) wage premiums required by union contract, and 4) annual and long term 7 performance compensation for eligible nonunion employees.

Base Pay - In order to calculate the base pay, the wage levels in effect during the 2017 period were applied to 2,088 and 2080 hours, for hourly non-union and salaried employees respectively for each full time position and added together. The hours for the 12 temporary summer positions were based on adjusted work hours, each position reflecting .25 hours of a full time employee. Wages for union employees were based on the collective bargaining agreement ("CBA") wage rates through 2019. If a contract rate has not been negotiated through this date, an hourly rate was calculated using a three-year average increase for each union. Non-union employees' wage rates were based on actual rates effective at April 1, 2017 to derive the 2017 expense levels. In order to calculate the expense for the current test year and the future test year, the salaries and wages for each non-union position were inflated using a three-year average increase percentage.

Overtime - The second component of the labor expense is overtime expense. Overtime was calculated based on a three year average of actual over time dollars from 2014, 2015 and 2016. The actual overall labor dollars were divided by the overtime dollars

to determine an overtime percentage. This percentage was then applied to the wages
for the current test year and future test year to calculate the overtime dollars for each
pro forma period respectively.

- Premium Pay The third component of the labor expense is the wage rate premiums required by the CBAs for employees who obtain special licenses, who work particular shifts, who operate backhoes, or who work scheduled holidays such as Thanksgiving, Christmas, and the Fourth of July. The premium pay expense is based on the 2016 dollar amount by employee.
 - Performance Pay The fourth component of labor expense is the annual and long term performance compensation for eligible nonunion employees. Performance pay was calculated on a position by position basis. It was based on each position's target percent for both the Annual Performance Plan ("APP") and Long Term Performance Plan ("LTPP"). The target percent was multiplied by each eligible employee's 2017 pro forma base salary to determine APP and LTPP. The current test year and future test year APP and LTPP were calculated using the same methodology leveraging the current test year and future test year pro forma base salaries. The summary of this adjustment can be can be found on Schedule CAS-13.

Q. Please describe the operating expenses related to payroll tax.

A. Payroll tax expense is directly related to salaries and wages. Two types of taxes are required to be paid in accordance with the Federal Insurance Contributions Act -- Old Age Survivors & Disability Insurance ("OASDI," or more commonly "FICA"), and Hospital Insurance (or more commonly "FICA Medicare"). Federal

- Unemployment Tax ("FUTA") and State Unemployment Tax ("SUTA") must also
 be paid. Pro forma payroll taxes were calculated on a position-by-position basis, using
 current 2017 tax rates and pro forma wages for the current test year and future test year.
 The tax rates include 6.2% FICA on up to \$127,200 of wages, 1.45% FICA Medicare
 on all wages, 0.0% SUTA on the first \$13,000 in wages, and 0.6% FUTA on the
 first \$7,000 in wages. The summary of this adjustment can be can be found on
 schedule **CAS-13**.
- 8 Q. Please describe the operating expenses related to group insurance.
- 9 A. The adjustment to group insurance expense is composed of two components:
 10 PBOP) and other non-PBOP group insurance. I will discuss the non-PBOP group
 11 insurance expense. The PBOP expense can be found in the direct testimony of John
 12 Watkins.
- 13 Q. What is non-PBOP group insurance?
- A. Non-PBOP group insurance includes basic life insurance, short- and long-term disability insurance, accidental death and disability ("AD&D") insurance, and medical, dental, and vision insurance that Missouri-American provides its employees.
- 17 Q. How was the pro forma adjustment for the non-PBOP insurance expense calculated?
- A. As previously discussed, several types of insurance expense make up this calculation, but they basically comprise two categories: 1) basic life, short- and long-term disability, and AD&D; and 2) medical, dental, and vision insurance.

The calculation of the pro forma expense for each of these categories is further described below.

Basic life, short- and long-term disability and AD&D. The 2017 pro forma expense for this category was calculated based upon the current 2017 plan rates. The resulting plan costs and contributions rates were used to calculate costs for each employee, according to the insurance stipulations and applying any differences for union and non-union employees. An inflation factor of 2.10% was applied to the 2017 pro forma expense to derive the current test year annualized 2018 expense. An inflation factor of 2.10% was then applied to 2018 expense to calculate the future test year expense amounts.

Medical, dental, and vision insurance. This category of insurance involves a Company cost net of employee contributions. The costs and contributions vary by plan type (e.g. family, employee, or employee plus spouse). Costs and contributions were calculated on a position-by-position basis, taking into account actual employee plan selections. The 2017 pro forma plan costs and employee contributions were based on current 2017 rates. An inflation factor of 2.10% was applied to the 2017 pro forma expense to derive the current test year annualized expense. An inflation factor of 2.10% was then applied to 2018 expense to calculate the future test year expense amounts. The summary of this adjustment can be can be found on Schedule CAS-13.

Q. Please describe the operating expenses related to 401k benefits.

A. Missouri-American incurs 401k expense when it matches employee contributions to 401k retirement accounts. The matching amounts are determined by each employee's

benefit group or hire date. For employees whose benefit group falls into an "original" category (including union employees hired before 2001 and non-union employees hired before 2006), the Company matches 50% of the first 5% of the employee's contribution (for a maximum of 2.5%). For the remaining employees, the Company matches 100% of the first 3%, and 50% of the next 2% of the employee's contributions (for a maximum of 4%). The 2017 pro forma 401k costs were calculated for each employee based on his or her 2017 wages, his or her current employee contribution levels, and the corresponding match for his or her benefit group. The current test year and future test year expense amounts were calculated using the same methodology; however, they were based on the employees' current test year and future test year pro forma wages. This adjustment is summarized on Schedule CAS – 13.

- Q. Please describe the adjustment to operating expenses related to the defined contribution plan ("DCP").
- A. DCP is a retirement savings program for employees not eligible for the defined benefit pension program. Under the DCP, Missouri-American contributes an amount equal to 5.25% of an employee's base pay into a retirement account. The 2017 pro forma DCP expense was calculated by multiplying the 2017 pro forma regular time pay of each eligible employee by 5.25%. The current test year and future test year expense amounts were calculated using the same methodology, however they were based on the employees current test year and future test year pro forma wages. A summary of this adjustment is shown on Schedule CAS 13.

- Q. Please describe the adjustment to operating expenses related to retiree medical
 expense.
- A. Union employees who are not eligible for PBOP, are entitled to Company-provided retiree medical benefits. Missouri-American has set up a trust (referred to as the Voluntary Employee Benefits Association, or VEBA) to fund this benefit in the amount of \$500 per eligible employee. In an effort to control costs, the Company excludes those employees from PBOP coverage. A summary of this adjustment is shown on Schedule CAS 13.
- Q. Please describe the adjustment to operating expenses related to the employee
 stock purchase plan.

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The purpose of this adjustment is to annualize the Company's expense associated with the Employee Stock Purchase Plan ("ESPP"). ESPP expense relates to the Company funded 10% discount of American Water stock purchases made through payroll deductions by enrolled employees. The expense was calculated based on the 2017 wages for each employee who participates in the plan. The employees 2017 base wage, times their individual contribution amount, applied to the ten percent company discount was used to calculate the 2017 expense. The current test year and future test year expense amounts were calculated using the same methodology, however, they were based on the employees current test year and future test year pro forma wages. The summary of this adjustment can be can be found on Schedule CAS-13.

IV. SUPPORT SERVICES

Q. What services does MAWC obtain from the Service Company?

A. The services provided by the Service Company include customer service, water quality testing, innovation and environmental stewardship, human resources, communications, information technology, finance, accounting, payroll, tax, legal, engineering, accounts payable, supply chain, and risk management services. The Service Company operates customer service centers in Alton, Illinois and Pensacola, Florida that handle customer calls, billing, and collection activities for MAWC and its public utility affiliates. The customer service centers handle customer inquiries and correspondence, and process service order requests. In addition, the Service Company operates two Field Resource Coordination Centers responsible for tracking and dispatching service orders for our field representatives and distribution crews. The Service Company also operates the Central Laboratory, located in Belleville, Illinois—one of the most advanced water quality laboratories in the United States.

A.

Q. What level of Service Company costs is MAWC seeking in this case?

MAWC is seeking recovery of \$30.93 million in Service Company costs for the future test year ending May 31, 2019, which is practically flat when compared to the Service Company costs expected for the current test year (\$30.88 million) and a slight increase over 2016 Service Company costs (\$30.23 million). The requested increase represents only about a two percent (2%) increase over 2016 expenses or about a one-half percent annual increase from 2016 through the future test year. The direct testimony of MAWC witness Patrick Baryenbruch discusses the reasonableness of Service Company costs charged to MAWC. The summary of this adjustment can be can be found on Schedule CAS-13.

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- 2 Q. Please explain which operating expenses are considered production costs.
- 3 A. Production costs are those expenses that vary depending on the amount of water
- 4 produced by the Company's treatment plants. These costs include fuel and power,
- 5 chemical, waste disposal, and purchased water.

6 Q. Please explain the system delivery impact on production costs.

- 7 A. System delivery is the amount of treated water that the Company's treatment plants
- 8 produce. Water sales as well as other factors impact the amount of water produced by
- 9 the plants, which in turn impacts expenses associated with treating that water. The
- 10 Company has proposed pro forma revenue adjustments related to declining usage and
- customer growth as discussed in the direct testimony of Company Witness Gregory P.
- Roach. Thus, the Company must use the same level of water sales used in its pro forma
- revenue adjustments to adjust its production related expenses accordingly.

14 Q. Please describe the fuel and power expense.

15 A. Fuel and power expense is composed of those costs associated with treating, pumping

and delivering water and collecting and treating wastewater. The Company's fuel and

power expense is composed of electricity, natural gas and miscellaneous purchased fuel

cost. In order to derive the 2017 expense levels the Company made three adjustments

to the 2016 base period expense for fuel and power.. The first adjustment removes any

accrual amounts from the 2016 base year expense. The second adjustment annualizes

the impact of known rate increases, which occurred in 2016 and will occur or have

already occurred in 2017. The final adjustment for water recognizes the impact of pro

forma system delivery. An inflation factor of 2.10% was applied to the 2017 expense to derive the expenses for the current test year. An inflation factor of 2.10% was then applied to the current test year expense for January to May 2019 to derive the future test year expense levels. The details of this adjustment can be found at Schedule CAS-13.

Q. Please describe the operating expense related to chemicals.

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The Company uses chemicals to bring chemical and biological contaminants within safe levels, as prescribed by the United States Environmental Protection Agency ("EPA") in accordance with the Safe Drinking Water Act. Chemicals are also utilized to remove turbidity (cloudiness) of the water and to address any remaining taste and/or odor issues, and for wastewater treatment. Water conditions can vary seasonally or due to other external factors, which impacts chemical usage and expense levels. Examples include drought or flood conditions, fertilizer runoff, water level and temperature. The amount of chemicals utilized by the Company thus varies depending on the season and other external factors. The 2017 expense levels for water were determined by calculating the three-year average usage by chemical. The three-year average chemical usage was then divided by the actual system delivery for the 2016 base year to determine the unit per 1,000 gallons of system delivery. The three-year average cost per pound by chemical is then applied to the 2017 pro forma system delivery to derive the appropriate expense. In order to calculate the current test year and future test year expense levels an inflation factor of 2.10% was applied the pro forma system delivery for the respective periods. The 2017 expense levels for sewer were determined by calculating the 2016 base year chemical usage to the 2017 cost per chemical. The cost

- was then inflated by 2.10% for the current test period and future test period. The details
 of this adjustment can be found at Schedule CAS-13.
 - Q. Please describe the operating expense related to waste disposal.

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A. The Company incurs waste disposal costs as a result of the need to properly dispose of sludge and other by-products resulting from water and wastewater treatment. Missouri-American treats waste disposal in some areas while in others, specifically related to wastewater, the company leverages a third party for treatment. Sludge removal and lagoon cleaning for MAWC occurs on a cycle ranging from 5 to 600 months. The cleaning schedule is based on the amount of waste and size of lagoon, consistent with EPA standards. Some lagoons are cleaned on an annual basis while others may only be cleaned every 240 months, with the average cleaning cycle running 24 months. The expense for waste disposal includes those charges incurred in 2016 and accrued expense for future scheduled cleanings in waste disposal. The accruals plus other monthly expensed waste disposal charges recorded by Missouri-American is representative of the total waste disposal expense. The accounting department using information provided by MAWC Operations Mangers/Supervisors for each respective district records these accruals. The accrual amounts are reviewed on a quarterly basis and updated if necessary. The expense levels for the current and future test period were calculated based on current accrual amounts by location with inflation factor applied for the respective periods. The purpose of this adjustment is to annualize the Company's expense related to waste disposal. The details of this adjustment can be found at Schedule CAS-13.

Q. Please describe the operating expense related to purchased water.

The purchased water expense includes the costs for purchasing water from other utilities. Contract purchase requirements and cost per thousand gallons are used to derive the expense. The purpose of this adjustment is to annualize the costs incurred to purchase water from outside sources. In order to calculate the expense, the Company used the 2016 per book system delivery by month, multiplied times the applicable rate, plus applicable taxes. Any miscoded items were then removed from the expense levels. Rate increases for each purchased water district were reviewed to determine average increase over a three-year period and applied by month to the applicable rate. A three-year average consumption was calculated for each purchased water district and applied to the calculated rate. This provided the current test year annualized 2018 expense levels. The future test year expense levels were calculated in the same manner, using the three-year average increase applied to the three-year average consumption. The details of this adjustment can be found at Schedule CAS-13.

VI. OTHER OPERATING EXPENSES

Q. Please describe the operating expenses related to rents.

A.

A.

Missouri-American incurs expense for rental costs associated with copy machines, other miscellaneous items, and two office locations- one at 727 Craig Rd St Louis Missouri, and one located at 1050 Fox Chase Industrial Court in Arnold Missouri. In order to calculate the appropriate expense levels for known office lease terms, the Company took the 2016 actual expenses and adjusted for changes in lease terms to derive the 2017 expense levels. In order to calculate the current test year expense for the remaining leases, the 2017 copier and miscellaneous lease expense levels were inflated by 2.10% and added to the building lease expense, for an annualized 2018

period. The future test year expense was calculated by applying an inflation factor of 2.10% to the copier and miscellaneous lease expense and added to the building lease expense for the January through May 2019 expense levels. The summary of this adjustment can be found on Schedule CAS-13.

5 Q. Please describe the operating expenses related to transportation.

A.

A.

Transportation expense includes transportation, operation and maintenance, and fuel costs. The Company first calculated its annualized 2017 pro forma transportation lease expense based on changes in leased vehicle and equipment levels as of January 2017, and twelve month average fuel rates. The maintenance expense was calculated based on the 2016 test period expense increased by the inflation factor of 2.00%. The O&M percentage was applied to the expense to obtain the O&M expense portion of the adjustment. The current test year pro forma expense was calculated by taking the 2017 lease expense, inflating specific maintenance items and gasoline expense by an inflation factor of 2.10% for the full 12 month period. The future test year expense was calculated by applying an inflation factor of 2.10% to the January through May 2019 expense levels for specific maintenance items and gasoline added to the lease expense. The summary of this adjustment can be can be found on Schedule CAS-13.

Q. Please describe the operating expenses related to postage and customer accounting.

The operating expense for postage and customer accounting is inclusive of expenses related to customer invoice mailings. In addition, it includes items from customer accounting expense such as; bill inserts, collection notices, lock box fees for payment collection, water quality reports, and customer communications etc. The pro forma

adjustment for postage expense was calculated by applying 2017 postal rates from the latest rate filing by the United States Postal Service to the number of actual mailings for 2016, adjusted for any acquisitions and projected growth for 2017. The current test year was calculated by adjusting the 2017 mailings for growth and acquisitions then applied to the 2017 postage rate inflated at 2.00%. The future test year was calculated by adjusting the 2018 projected mailings adjusted for growth, acquisitions, and the St Louis County quarterly to monthly billing conversion, then applied to the 2018 inflated postage rate inflated again for the period of January through May of 2019 with an inflation factor of 2.00%. The remaining customer accounting expenses were calculated leveraging an inflation factor of 2.00%, 2.10% and 2.10% for 2017, 2018 and 2019 respectively for the current test year and a partial years inflation factor for the future test year. The summary of this adjustment can be found on Schedule CAS-13.

Q. Please describe the operating expenses related to miscellaneous expense.

A.

The operating expense described as miscellaneous expense includes expenses for charitable contributions, penalties and membership dues, lobbying, relocation expenses, office power, heating and oil, as well as other miscellaneous expenses; such as telephone, cell phone, shipping, uniforms, and customer education expenses. The miscellaneous expense adjustment then removes expenses for charitable contributions, penalties and membership dues, lobbying and relocation expense. The details of this adjustment can be found at Schedule CAS-13.

21 Q. Please describe the operating expenses related to contract services.

A. The contracted services expense includes costs associated with landscaping, Missouri one call, accounting, audit and legal fees that are performed by a contracted third party.

In order to calculate the appropriate expense levels the Company took the 2016 actual
expenses and adjusted for acquisitions, and removal of the tank painting tracker
expense dollars to derive the 2017 expense levels. In order to calculate the current test
year expense, the 2017 levels were inflated by 2.10% for an annualized 2018 period.
The future test year expense was calculated by applying an inflation factor of 2.10% to
the January through May 2019 expense levels. The details of this adjustment can be
found at Schedule CAS-13

- Q. Please describe the operating expenses related to maintenance supplies and
 services.
- 10 A. The operating expense associated with maintenance supplies and services are those expenses associated with maintenance cost for the general operation of the business, hydrant painting expense, and finally main break expense for St Louis County.
- Q. Please discuss the maintenance supplies and services expense associated with hydrant painting.
 - A. The first part of the expense is the maintenance cost for the general operation of the business and hydrant painting. In order to calculate the appropriate expense levels, the Company took the 2016 actual expenses and adjusted for acquisitions, miscoded invoices and anticipated hydrant painting cost to derive the 2017 expense levels. In order to calculate the current test year, the 2017 levels were adjusted for any acquisitions, additional hydrant painting expense, and inflated by 2.10% for an annualized 2018 period. The future test year expense was calculated by adjusting for any acquisitions, additional hydrant painting expense, and applying an inflation factor of 2.10% to the January through May 2019 expense levels. Please see the direct

testimony of Andrew Clarkson for additional detail regarding hydrant painting.

Q. Please discuss the maintenance supplies and services expense associated with main

3 breaks.

A.

A.

The Company calculated an adjustment for main break expense associated with breaks that occur in St Louis County. The purpose of this adjustment is to annualize main break expense to a normalized, pro forma level based on a review of historical main breaks and the cost to repair the breaks in St Louis County. In order to calculate the appropriate expense levels, the Company took a three-year average count of main breaks and expense from 2014, 2015, and 2016 actual expenses. The three-year average expense was then applied to a 2.00% inflation factor to derive the annualized 2017 expense levels. In order to calculate the current test year expense, the 2017 levels were inflated by 2.10% for an annualized 2018 period. The future test year expense was calculated by applying an inflation factor of 2.10% to the January through May 2019 expense levels. The details of this adjustment can be found at Schedule CAS-13. Please see the direct testimony of Andrew Clarkson for additional detail regarding main breaks.

Q. Please describe the operating expenses related to tank painting.

The tank painting expense includes costs associated with painting the interior and exterior of system water storage tanks. In order to calculate the appropriate expense levels, the Company determined the projected cost of painting specific tanks for the 2017, 2018, and 2019 periods, using 2016 as the base period for expense. The Company then used these projected expense levels to determine the level of expense for the current test year as well as the future test year. The current test year was

calculated by using 7 months of the projected 2017 expense and 5 months of the projected 2018 expense, plus amounts remaining from the deferred tank-painting tracker. The future test year was calculated using 7 months of the projected 2018 expense levels, and 5 months of the projected 2019 expense levels, plus amounts remaining from the deferred tank painting tracker. The 2019 expense level includes a reduction to the tracker amortization of \$148,668. This represents a 3-year amortization of \$445,990 dollar tank painting tracker liability, which is also reflected in the CAS-3 schedule. The details of this adjustment can be found at Schedule CAS-13. Please see the direct testimony of Andrew Clarkson for additional detail regarding tank painting.

A.

Q. Please describe how the Company's insurance other than group costs are determined.

Missouri-American incurs costs related to several types of insurance, including Auto Liability, General Liability, Worker's Compensation, and Property. The insurance costs are referred to as insurance other than group ("IOTG"). The Company's General Liability, Auto Liability and Workers Compensation premium is based upon a combination of loss experience (50%) and exposure (50% estimated annual revenue and payroll). Exposure for Auto Liability uses estimated annual revenue, payroll and number of vehicles. The loss experience is based upon a 5-year average of historical loss experience. The 5-year average is used to smooth out losses to the extent that MAWC suffers an anomalous year of claims experience. This is consistent with the commercial insurance market underwriting practice.

O. Please describe the IOTG pro forma adjustments to operating expenses.

The majority of the Company's IOTG premiums renew on January 1 of each year (Directors & Officers Liability insurance renews in April each year). Development of the pro forma expense begins with the annual premiums owed as of early 2017, which are \$465,458 higher than the premiums in 2016. The 2017 level of IOTG expense is adjusted first to arrive at the annualized expense level for the 12 months ending of May 31, 2018, and then to arrive at a forecast expense for the twelve months ending May 31, 2019. The first adjustment to these premiums is an annual inflation factor of 2.1%, which is applied to policies, which expire before May 31, 2018. Next, the pro forma capitalized labor percentage was multiplied by the new Worker's Compensation premium, to reduce the expense. After this, an adjustment is made to increase IOTG due to various acquisitions. The 2017 level was adjusted to remove capitalized credits for certain insurance premiums not capitalized by other MAWC affiliates. These credits totaled \$447,351 in 2016. Please also see Schedule CAS-13 for the detailed calculation.

A.

A.

Q. Please describe the operating expenses related to uncollectible expense.

Uncollectible expense are those dollars associated with bad debt. In prior cases, the Company has calculated the uncollectable expense by applying a 3-year average of netcharge offs to billed water and sewer revenue for a twelve-month period. However, recent trends in uncollectible percentage of billed revenue have shown a steady decline year over year. In 2014, uncollectibles represented 1.69% of total billed water and sewer revenue. In 2015, uncollectibles represented 1.55% of total billed water and sewer revenue. Finally, in 2016, uncollectibles represented 1.05% of total billed water and sewer revenue. As such, the Company believes that the uncollectible percentage

will not reach the 3-year average of 1.43%, rather the trend supports a reduced number of 0.75% net charge offs to water and sewer revenue in this filing. The uncollectible expense amount is calculated by taking the 0.75% uncollectible percentage, applied to the total Company projected revenues for the period. The same methodology was used for the 2018, and 2019 expense levels using the projected revenues for each respective period. The summary of this adjustment can be found on Schedule CAS-13.

Q. Please describe the adjustment to operating expenses related to PSC Assessment.

A. The purpose of this adjustment is to annualize the PSC Assessment fee. The pro forma amount is based on the current PSC Assessment ratio of 1.091415180% for fiscal year beginning July 2016. The annual PSC Ratio of 1.091415180% is applied to the May 2018 Twelve months Pro Forma Present rate Revenue to obtain the May 2019 PSC expense. The summary of this adjustment is found on Schedule CAS-13.

13 Q. Does this conclude your direct testimony?

14 A. Yes, it does.

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