Exhibit No.: Issue(s):

District Consolidation/ Decoupling Mechanism/ Residential Usage/ Supply Side Efficiency/ Demand Side Efficiency/ Special Contracts Marke/Surrebuttal Public Counsel WR-2015-0301

Witness/Type of Exhibit: Sponsoring Party: Case No.:

SURREBUTTAL TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2015-0301

March 4, 2016

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

)

In the Matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas.

Case No. WR-2015-0301

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)) ss COUNTY OF COLE)

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

- 1. My name is Geoff Marke. I am a Regulatory Economist for the Office of the Public Counsel.
- 2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
- 3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Geoff N

Subscribed and sworn to me this 4th day of March 2016.



JERENE A. BUCKMAN My Commission Expires August 23, 2017 Cole County Commission #13754037

j.

Jerene A. Buckman Notary Public

My commission expires August 23, 2017.

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		SURREBUTTAL TESTIMONY
		OF
		GEOFF MARKE
		MISSOURI-AMERICAN WATER COMPANY
		CASE NO. WR-2015-0301
1	I.	INTRODUCTION
2	Q.	Please state your name, title and business address.
3 4	А.	Dr. Geoffrey Marke, Economist, Office of the Public Counsel (OPC or Public Counsel), P.O. Box 2230, Jefferson City, Missouri 65102.
5 6	Q.	Are you the same Dr. Marke that filed direct and rebuttal testimony in WR-2015-0301?
7	А.	I am.
8	Q.	What is the purpose of your surrebuttal testimony?
9	A.	I am responding to rebuttal testimony regarding:
10		Proposed District Consolidation
11		o Missouri American Water Company (MAWC or Company) witness Karl A.
12		McDermott
13		• Missouri Public Service Commission Staff (Staff) witness James A. Busch
14		Decoupling Mechanism
15		• Staff witness James A. Busch
16		Residential Usage
17		 Company Witness Gregory P. Roach
18		Supply Side Energy Efficiency
19		 Company witness Kevin H. Dunn
20		• Staff witness James A. Merciel, Jr. and Mark L. Oligschlaeger
21		

Surrebuttal Testimony of Geoff Marke Case No. WR-2015-0301 **Demand Side Energy Efficiency** 1 2 o Company witness Philip C. Wood Staff witness James A. Merciel, Jr. 3 \cap **Special Contracts** 4 Staff witness James A. Busch 5 0 6 Please state OPC's positions? Q. 7 OPC has not changed its position on any of the outstanding issues stated above to which A. 8 parties responded in rebuttal testimony. As it stands OPC: Does not believe further district consolidation is warranted based on the evidence in 9 10 this case; 11 Is in agreement with Staff's opposition to the Company's proposed decoupling 12 mechanism: Disagrees with the Company's residential declining usage assertions; 13 Is in agreement with Staff in opposition to the Division of Energy's (DE) supply-14 • 15 side mechanism proposal; Is in agreement, in part, with Staff and the Company's opposition to DE's demand-16 side programs proposal due to the lack of details and cost-justification; and 17 Is in agreement with Staff that a review of the contract between MAWC and 18 19 Triumph Foods is appropriate moving forward. II. DISTRICT CONSOLIDATION 20 Q. Please summarize the proposals before the Commission. 21 A. The Company proposed three zones combining districts with similar current rates. 22 23 Staff proposed three zones based loosely on geographical locations and operating 24 characteristics. Finally, OPC and the Missouri Industrial Energy Consumers (MIEC) have 25 proposed that the districts remain in the current form.

1	Q.	What was the Company's response?
2	A.	Dr. McDermott did not respond to Staff's proposed consolidation. However, he did
3		provide four general objections to my rebuttal testimony summarized as follows:
4		1.) No marginal cost pricing study was conducted to substantiate cost differences
5		between districts;
6		2.) Water utilities operate in the same manner as electric and gas utilities;
7		3.) Future acquisitions could be set as stand-alone districts; and
8		4.) The potential for overinvestment due to district consolidation is unfounded.
9		I will respond to each objection in turn.
10	Q.	Please explain Dr. McDermott's first objection.
11	A.	Dr. McDermott's primary objection to OPC and MIEC's arguments against consolidation
12		centers on the fact that neither party performed a marginal cost study. As stated by Dr.
13		McDermott:
14		Economics has only one view of costs in relation to consumption and
15		production efficiency: Prices should be based on marginal opportunity
16		cost which provides the correct price signal for firms to produce in an
17		efficient manner and consumers to consume in an efficient manner. Any
18		other measure of cost does not tell us anything about the efficient
19		production and consumption patterns. ¹
20	Q.	What does marginal cost pricing mean?
21	A.	Simply put, marginal cost pricing means charging consumers a price that reflects the
22		additional costs to the producer of an additional unit of consumption. The most obvious
23		contrast to marginal cost pricing is average cost pricing. To provide a simplified
24		illustration, if some amount of water costs two cents to provide in St. Louis and eight

¹ WR-2015-0301 Rebuttal Testimony of Karl A. McDermott p. 3, 20-25. 3

cents to provide in St. Joseph, a marginal cost tariff would charge those amounts respectively. Thus, an average cost tariff would charge five cents for each district.

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Q. Did you perform a marginal cost study?

A. No. There are <u>many</u> reasons why no such study was performed. Dr. McDermott's own testimony spells out the most relevant reason:

Notice, however, that if the Commission were to set the price at marginal cost the Company would not recover its sunk costs and would never invest in the system in the future. Therefore, regulation makes a legal requirement that all prudently incurred costs, including sunk costs, must be recovered through rates and the process by which this is done is the ECOSS [embedded cost of service study].²

Generally, I am in agreement with Dr. McDermott's economic argument—in a perfect
world such an analysis (assuming the parameters, methodology and data were all agreed
to by parties) would be helpful. However, such studies are rare in utility regulation for the
accounting and legal reasons articulated above. This is particularly true for water utilities
due to the historically inexpensive cost of the resource. The fact that such a study was not
conducted does not invalidate or detract in any way the embedded cost studies performed.

It has been extremely difficult to get consistent customer account and usage data across districts from the Company in this case. Seen in that light, a reliable marginal cost study represents a herculean task.

Q. Please explain Dr. McDermott's second objection.

A. Dr. McDermott's second objection is an argument echoed from his direct testimony—that consolidation is justified because water utilities operate in the same manner as electric and gas utilities. He states:

² WR-2015-0301 Rebuttal Testimony of Karl A. McDermott p. 11, 22-26.

The left side of Figure 2 shows Ameren Missouri's service territory.
Ameren Missouri is nearly as large and geographically diverse as MAWC
large districts. So if it is true that MAWC faces dramatically different
costs it must also be true for Ameren Missouri since it too would face
differences in demographics, customer density, economies, and
geographies in roughly the same areas of Missouri. ³

Figure 2: Reprinted Figure 1 from Dr. McDermott's rebuttal testimony comparing

Ameren Missouri's footprint with MAWC's seven largest water districts



Q. Please respond.

A. As stated in my direct testimony, variations between districts are based in part on the accessibility and availability of those sources of local water. Location matters in the water utility cost of service, for both the quality of the product and for the availability of the resource in a manner that is not comparable to electric or gas operations. For example, an Ameren Missouri customer in Jefferson City is not dependent on the availability, treatment and distribution of Jefferson City fuel or generation to power their lights. Figure 3 illustrates this by contrasting the Ameren Missouri's service footprint with the location of Ameren Power Generation.

³ Ibid. p. 7, 7-12 & 20.

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- Figure 3: Comparison of Ameren Missouri's service territory with the location of its power
 - generation4,5



Even then, Figure 3 is misleading because Ameren Missouri is a member of the Midcontinent Independent System Operator (MISO), which acts as a marketplace operator for wholesale power throughout the entire footprint seen in Figure 4.

Ameren Missouri (2016) Work with Economic Development https://www.ameren.com/business-partners/ecdev/work-with-us

Ameren Missouri (2016) Today's Power Generation. https://www.ameren.com/missouri/my-business/uew/todaysgeneration б

1 Figure 4: MISO's Electric Power Market Footprint⁶⁷



In reality, Ameren Missouri customers have system-wide benefits as well as increased costs that come with the electric grid and the MISO membership. This means that the generation unit powering a customer's lights in Jefferson City may come from any power generating plant within the MISO footprint. The same cannot be said for MAWC customers. Treating MAWC customers as if they function under the same market conditions or have the same resource flexibility as Ameren Missouri customers runs counter to the manner MAWC actually operates.

 ⁶ Matlock, R. (2015) MISO Overview. <u>https://www.pca.state.mn.us/sites/default/files/aq-rule2-20u.pdf</u>
 ⁷ MISO's footprint extends into the province of Manitoba, Canada.

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Q. Do you agree with Dr. McDermott's suggestion that future acquisitions do not necessarily have to be consolidated?

A. Yes. I would agree any decision the Public Service Commission (PSC or
Commission) makes in this rate case regarding the consolidation and acquisition
of current and/or future districts would not be binding.

Q. Please respond to Dr. McDermott's objection to your stated concerns about overinvestment.

A. Dr. McDermott inaccurately portrays my sentiment on this issue. Consolidation of
districts does not automatically guarantee "gold-plating" will occur. Rather, I posited
further consolidation would increase the likelihood that over-investment could occur
based on the diminished price signals and reduced oversight.

12 **Q.** What was Staff's response to the various proposals?

- A. Staff opposes the Company's proposal and acknowledges the concerns raised by OPC
 and MIEC regarding the increased potential for overinvestment by citing a historical
 example: the St. Joseph water treatment plant. However, Staff witness James A. Busch
 claims this concern is mitigated in part due to the 1999 acquisition of the St. Louis
 County Water Company (SLCWC).⁸ Mr. Busch's testimony reads as follows:
 - Q. Why is the change in composition of MAWC important?
 - A. The change in composition of MAWC is important because it no longer only operates in a limited number of districts of relatively similar size. It is a water utility that provides service to a single, large area with over 350,000 customers [St. Louis County], as well as to a single, small area with only 15 customers. It has expanded to take systems that were failing and it has grown its operations. Therefore, the manner in which it is

⁸ See Case No. WM-99-224.

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regulated through its rate design needs to evolve to address this new reality.⁹ Mr. Busch then argues consolidation is necessary to ensure MAWC will still be incentivized to purchase any current or potentially distressed systems in the future. He states: First, Staff keeps a list of entities that it has personal knowledge of that have expressed an interest in expanding to this list. Second, a water/sewer utility in receivership recently was ordered by a Circuit Court Judge to solicit bids for the transfer of its assets. This was a decent-sized system with decent revenues as far as small systems are concerned. <u>MAWC was</u>

one of four entities to place a bid (emphasis added).¹⁰ Finally, Staff offers that the Commission requires MAWC to file a five-year capital

expenditure plan for review by January 31 of each year with an opportunity for parties to respond to minimize the potential of future overinvestment.

15 **Q.** Does OPC agree?

A. No, Staff's proposal is based on generalizations and lacks foundation. According to Staff's own admission, there is a historical precedent that validates the concerns expressed in OPC's direct testimony regarding unwarranted consolidation and over-investment. Remarkably, Staff dismisses that concern because the imprudent capital investment that occurred in St. Joseph predates the acquisition of the SLCWC system—an acquisition that took place over seventeen-years ago.

I disagree with this premise. Just because the St. Louis County water district (which has since been consolidated with St. Charles to form St. Louis Metro) is large does not mean

⁹ WR-2015-0301 Rebuttal Testimony of James A. Busch, p. 10, 5-11.

¹⁰ Ibid. p. 12, 12-17.

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its customers should bear the costs for systems where no benefit is gained.¹¹ Moreover, the acquisition of the SLCWC system occurred more than seventeen years ago and multiple rate cases, acquisitions, and consolidation efforts have transpired since. This hardly reflects a "new reality" necessitating a departure from the principles of cost causation for MAWC and its customers.

OPC further opposes Mr. Busch's claim that Staff's proposed consolidation is necessary to incentivize MAWC to purchase current and future distressed systems. Not only has MAWC purchased and acquired distressed (and non-distressed) systems since they entered Missouri, they continue to do so. Mr. Busch seeks a solution to a problem that either does not exist or is already answered based on present market conditions.

Finally, Staff's proposed capital expenditure plan requirement for MAWC lacks sufficient details and is too general as presently proposed for OPC to comment on meaningfully.

14 **III.**

DECOUPLING MECHANISM

15 **Q.** Please summarize the proposal before the Commission.

A. In direct testimony, Company witness Jeanne M. Tinsley proposed that the Commission approve a revenue stabilization mechanism (RSM or decoupling) based on the following arguments:

- Weather risk is eliminated
- Controversies over pro forma revenues are eliminated
- Reduction in the number of rate cases and the associated expenses
- Company is free to promote water efficiency

¹¹ In economics, this is commonly referred to as a "moral hazard." A moral hazard refers to the elevated risks one party might take in an economic transaction because another party will bear the negative consequences of those risks. See also, Thoma, M. (2013) Explainer: What is "moral hazard" CBS Money Watch. http://www.cbsnews.com/news/explainer-moral-hazard/

1		• The current cost of operating water systems are not being covered
2		• Long-term water use trends are downward for the Company
3		• Other utilities receive this form of ratemaking treatment
4		My rebuttal testimony addressed each of these arguments. Furthermore, I noted Ms.
5		Tinsley offered neither a tariff filing nor any guidance within her testimony as to exactly
6		how this mechanism works in practice.
7	Q.	What was Staff's response?
8	A.	Staff opposed the Company's proposal and Mr. Busch articulated the same concerns and
9		offered similar objections that I made in my rebuttal testimony.
10	Q.	Did the Company have any comments in rebuttal?
11	A.	No, MAWC did not file any supporting documentation regarding the proposed decoupling
12		mechanism in rebuttal testimony.
13		OPC continues to maintain its recommendation that the Commission reject this proposal.
13 14	IV.	RESIDENTIAL USAGE
		RESIDENTIAL USAGE
14	IV. Q.	
14 15		RESIDENTIAL USAGE What was the Company's original position on the issue of residential non-
14 15 16	Q.	RESIDENTIAL USAGE What was the Company's original position on the issue of residential non- discretionary usage?
14 15 16 17	Q.	RESIDENTIAL USAGE What was the Company's original position on the issue of residential non- discretionary usage? In direct testimony, Company witnesses, Gregory P. Roach and Kevin H. Dunn argued
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14 15 16 17 18 19	Q.	RESIDENTIAL USAGE What was the Company's original position on the issue of residential non- discretionary usage? In direct testimony, Company witnesses, Gregory P. Roach and Kevin H. Dunn argued that there is a continuing decline of water use across all MAWC districts, at various ranges, based on the ten-year sales and customer account information confined to the
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14 15 16 17 18 19 20 21	Q.	RESIDENTIAL USAGE What was the Company's original position on the issue of residential non- discretionary usage? In direct testimony, Company witnesses, Gregory P. Roach and Kevin H. Dunn argued that there is a continuing decline of water use across all MAWC districts, at various ranges, based on the ten-year sales and customer account information confined to the "winter months" of February, March and April. Mr. Roach's testimony then expounded on the reasons behind this:
14 15 16 17 18 19 20 21 22	Q.	RESIDENTIAL USAGE What was the Company's original position on the issue of residential non- discretionary usage? In direct testimony, Company witnesses, Gregory P. Roach and Kevin H. Dunn argued that there is a continuing decline of water use across all MAWC districts, at various ranges, based on the ten-year sales and customer account information confined to the "winter months" of February, March and April. Mr. Roach's testimony then expounded on the reasons behind this: This decline can be attributed to several key factors, including but not
14 15 16 17 18 19 20 21 22 23	Q.	RESIDENTIAL USAGE What was the Company's original position on the issue of residential non- discretionary usage? In direct testimony, Company witnesses, Gregory P. Roach and Kevin H. Dunn argued that there is a continuing decline of water use across all MAWC districts, at various ranges, based on the ten-year sales and customer account information confined to the "winter months" of February, March and April. Mr. Roach's testimony then expounded on the reasons behind this: This decline can be attributed to several key factors, including but not limited to: increasing prevalence of low flow (water efficient) plumbing

1		federal government, state government, MAWC and other entities, and
2		price elasticity. ¹²
3		In addition to the efficient appliance argument, Company witnesses Roach, Dunn, and
4		Jeanne Tinsley produced a considerable amount of testimony speaking to fluctuations in
5		discretionary residential water usage resulting from weather. However, no attempt was
6		made to weather normalize any of the Company's consumption data.
7	Q.	Did other parties file direct testimony on this topic?
8	A.	Yes, Staff (Busch) and OPC (Mantle) both proposed utilizing five-year averages (albeit
9		with slightly different ranges) for setting the revenue requirement moving forward.
10	Q.	Did the Company file rebuttal testimony on this topic?
11	A.	Yes, Mr. Roach was critical of both Staff and OPC's proposed five-year average in direct
12		testimony stating that those proposals:
13		are misplaced and illusionary and have no impact on the analysis
14		conducted by MAWC to develop Test Year sales volumes and
15		revenues. ¹³
16		Furthermore, Mr. Roach objected to Staff and OPC's methodology on the premise those
17		figures failed to normalize for weather and omitted the Company's efficient appliance
18		trend adjustment.
19		In setting Test Year sales volumes and revenues, the Commission Staff
20		and OPC used a simple 60 month averaging technique that was not
21		normalized for varying weather conditions, a declining use trend or any
22		other factor. ¹⁴
23		In addition, his rebuttal testimony also responded to specific objections articulated by
24		Staff and OPC during off-the-record settlement discussions but not stated in filed direct
	$\frac{12}{12}$ WP \sim	2015 0201 Direct Testimony of Gregory P. Bosch, p. 4, 14, 17

 ¹² WR-2015-0301 Direct Testimony of Gregory P. Roach, p. 4, 14-17.
 ¹³WR-2015-0301 Rebuttal Testimony of Gregory P. Roach, p. 3, 4-6.
 ¹⁴ Ibid. p. 3, 13-16.

1		testimony. Consequently, at least part of Mr. Roach's revenue requirement rebuttal
2		testimony is actually a response to Staff and OPC's revenue requirement rebuttal
3		testimony (e.g., he references concerns raised by Staff and OPC over specific billing
4		months yet no testimony had been filed referencing any such months).
5		Finally, it is important to note there were two iterations of rebuttal testimony. Mr. Roach
6		responded only in the first (revenue requirement). One week later, I submitted a second
7		rebuttal testimony (rate design) objecting to his claim that MAWC is facing a historical
8		and persistent decline in residential water usage due to the proliferation of efficient
9		appliances. ¹⁵
10	Q.	What should the Commission be cognizant of before going into detail regarding Mr.
11		Roach's weather analysis?
12	A.	No attempt has been offered by the Company (or any other party) to tender a weather
13		normalized adjustment to the revenue requirement.
14	Q.	What has been offered for consideration as the appropriate residential customer
15		usage?
16	A.	Both Staff and OPC proposed a five-year average (with slightly different ranges) based
17		on residential total water sales and customer accounts from data provided by the
18		Company to Staff's data requests 0235 and 0239.
19		In direct testimony, Mr. Roach put forward multiple different temporal periods for
20		consideration in which he utilized a different set of Company residential data (compared
21		to those used by Staff and OPC) to assert his efficient appliance argument.
22		In rebuttal testimony, he looked only at average temperatures for select months based on
23		data confined only to Lambert St. Louis International Airport's weather station at both

¹⁵ Mr. Roach's assertion of the proliferation of efficient appliances in MAWC's service territory is offered, in part, as support for MAWC's decoupling mechanism. Because the Company was ordered by the Commission to respond to Staff's decoupling report one day before rate design rebuttal was due, I filed testimony in the second round of rebuttal providing proper context for OPC's objection to the decoupling mechanism.

	Case No. W R-2015-0301
1	five and forty-year ranges. Figure 5 provides a breakdown of the ranges and data sets
2	utilized by parties to date:
3	Figure 5: Breakdown of residential usage and weather trends put forward in testimony
4	Staff (direct)
5	• Five-year average
6	• 60 months (October 1 st 2010 to September 30, 2015)
7	• Data provided by Company in Staff data requests 0235 and 0239
8	OPC (direct)
9	• Five-year average
10	• 60 months (January 1, 2010 to December 31, 2014)
11	• Data provided by Company in Staff data requests 0235 and 0239
12	MAWC's efficient appliance adjustment (direct)
13	• Ten-year trend analysis to develop non-discretionary baseline usage includes:
14	o 120 months (January 2005 – Dec. 2014 in schedule GPR 2)
15	o 30 months (February, March and April 2005-2014 in schedule GPR 2)
16	• 30 months (February, March and April 2006 – 2015 in schedule GPR-3)
17	• 180 months for Joplin-only analysis (2000 to 2015 in schedule GPR-5)
18	• Data provided by Company in Kevin H. Dunn direct testimony work papers
19	MAWC's "average" St. Louis weather analysis (rebuttal)
20	• Five-year average temperature of Lambert St. Louis International Airport weather
21	station
22	• 60 months referenced in testimony but only 25 months utilized in the work
23	papers (May, June, July, August and September for years 2011 - 2015)
24	Contrasted against
25	• Forty-year average temperature of Lambert St. Louis International Airport weather
26	station
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- 480 months implied in testimony but 200 months utilized in the work papers (May, June, July, August and September 1976 2015)
- Data provided in Roach's rebuttal testimony work papers

In my direct testimony I proposed the Commission consider opening a Rate Design docket specifically for MAWC in large part because parties were operating with different Company-provided data sets to inform their analysis. This was supported with Mr. Dunn's work papers and the Company's response to Staff's data requests filed as attachments in which cells were highlighted showing the discrepancies.

In my rebuttal testimony I suggested there is nearly unlimited room to manipulate data, especially if one is predisposed to a specific outcome. I expounded on the lack of support surrounding Mr. Roach's efficient appliance hypothesis as it pertains to Missouri as well as his failure to account for weather, price elasticity, inconsistencies in billing between districts and the Great Recession.

In surrebuttal testimony I will address the flaws surrounding his "average" St. Louis weather analysis.

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Q. What is the basis for Mr. Roach's weather analysis?

A. Mr. Roach opens his rebuttal testimony centered on Staff's and OPC's "distorted" and
"simplistic" use of averaging across five-years of residential usage and account
information over all districts. His central point is that a five-year average would show no
downward trend line, in part, because the past five years are not representative of normal
weather.

He then performed his own averaging of five and forty-year monthly temperatures seen at St. Louis Lambert International Airport.

To be clear, Mr. Roach is critical of Staff's and OPC's use of averaging but then counters with his own averaging analysis restricted to only temperature and isolated to only one location (St. Louis).

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Q. Is average temperature the only weather-related variable to consider for a water utility?

 A. No, according to a 2010 article on designing and evaluating water usage and benchmarking metrics from the American Water Works Association (AWWA), precipitation (rainfall) should also be considered. According to the journal:

> The weather adjustment can be performed directly on the calculated value of any metric with the use of parameters (in the form of constant elasticities) that capture the sensitivity of water use to weather. <u>The two</u> <u>key variables that are often used in modeling the effects of weather on</u> <u>urban water demand are precipitation and maximum daily air</u> <u>temperature.</u> For example, the weather-normalized value of the metric of average annual use in the single-family sector can be calculated as:

$$\begin{array}{l} AUM_{atn}{}^{SF} = \\ AUM_{at}{}^{SF} \times \left(\frac{T_n}{T_t}\right)^{\alpha} \times \left(\frac{R_n}{R_t}\right)^{\beta} \end{array}$$

In which AUM_{atn}^{SF} = weather-normalized single-family annual use metric in gpd per account in year, AUM_{at}^{SF} = calculated value of the metric in gal/account in year t, T_t = average maximum daily air temperature during the growing season of year t, T_n = normal value of average maximum daily air temperature during the growing season, R_t = total rainfall during growing season in year, t, R_n = normal value of total rainfall during growing season, α , β = constant elasticities of temperature and precipitation, respectively, and *atn* = per account use *a* and normal year weather *tn* (emphasis added).¹⁶

¹⁶ Dziegielewski, B. & J.C. Kiefer (2010) Appropriate design and evaluation of water use and conservation metrics and benchmarks. American Water Works Association 102, 6.

Q. Should average St. Louis temperature be the default source for determining MAWC's weather exposure?

A. Absolutely not. MAWC's service territory extends hundreds of miles across Missouri and it
 would be suspect to suggest districts are all uniform in their monthly temperature and in the
 amount of precipitation experienced.

Q. Do you have any concerns with comparing the forty-year St. Louis data with the five-year St. Louis data?

A. Yes. In addition to the reasons articulated above, Mr. Roach's conclusions regarding the differences in the St. Louis averages are a result of the small sample size utilized in the five-year analysis. That is, although his testimony speaks to 60 months as the range examined, the analysis only looks at 25 months. All things being equal, it is no surprise there are differences when comparing the averages of 25 data points against the averages of 200 (five months over 40 years) or 480 (12 months over 40 years) data points.

14 **Q.** Are there any final comments you wish to make on this subject?

A. Yes. Staff is currently investigating problems related to as many as 97,000 meters in
 MAWC's service territory. This represents approximately one-fifth of all of MAWC's
 customers. Further information will likely come about regarding the extent and scope of the
 problem, but the sheer size of the problem already should give all parties pause regarding
 the accuracy of any historical water usage trend.

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http://www.hazenandsawyer.com/uploads/files/Journal Article Water Use and Conservation Metrics and Bench marks.pdf

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V. SUPPLY SIDE ENERGY EFFICIENCY

Q. Please summarize the proposal before the Commission.

A. In direct testimony, DE witness Jane Epperson proposed the Commission authorize a
tracker for supply-side energy efficiency and water-loss reduction investments made in
excess of \$100M annually, with costs capped at an additional \$100M annually. Stated
differently, the tracker would apply to costs related to supply-side energy efficiency and
water loss reduction investments by the Company at a \$100M -\$200M range annually.

8 Q. What was the Company's response?

A. Company witness Kevin H. Dunn offered a modification to DE's proposal by suggesting
that the threshold annual investment level be the average of total annual expenditures,
less actual total annual expenditures from the Company's Infrastructure System
Replacement Surcharge (ISRS). This results in the annual threshold investment level
being reset from DE's proposed \$100 million to the Company's proposed \$50 million
level.

15 Q. Does OPC agree?

- A. No. The Company offered no supporting testimony substantiating DE's proposal. It
 merely lowered the bar (from \$100M to \$50M) for when a deferral would go into effect.
 All of the outstanding concerns and objections raised previously in rebuttal testimony to
 Ms. Epperson are magnified under the Company's criterion.
- 20 **Q**.

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What was Staff's response?

- A. Staff opposes DE's proposal. Staff witness Mr. Merciel offered five specific reasons
 including:
 - 1. A deferral of capital expenditure is not considered by Staff to be the proper way of handling capital expenditures;
 - 2. Staff is unsure of the benefit or the need to provide such a deferral as an incentive for MAWC to undertake water and energy savings projects;

1		3. Details of what projects, or portions of projects that would be eligible for
2		inclusion [sic];
3		4. Cost effectiveness is not presently addressed as a factor for eligible
4		capital projects; and
5		5. Staff is unsure whether or not DE's proposed threshold levels to begin the
б		deferral, and to limit of [sic] the amount that may be deferred, are
7		reasonable. ¹⁷
8		In addition, Staff witness Oligschlaeger echoes Mr. Merciel's arguments and states:
9		The Staff recommends that the Commission not adopt MDOE's proposal,
10		as MDOE has not demonstrated that extraordinary ratemaking
11		approaches are necessary to induce MAWC to reasonably invest in
12		energy efficiency and water loss reduction initiatives, or that the amount
13		invested by MAWC in this areas [sic] has been inadequate in the past. ¹⁸
14	Q.	Does OPC agree?
15	A.	Yes. OPC reached the same conclusions as Staff on this issue.
16	VI.	DEMAND SIDE ENERGY EFFICIENCY
17	Q.	Please summarize the proposal before the Commission.
18		In direct testimony, DE witness Martin R. Hyman proposed that the Commission require
19		the Company promote demand-side efficiency end-use measures with expenditures
20		targeting 0.5 percent of the annual average total revenue (approximately \$1.55M), funded
21		through a regulatory asset account that would be collected in future rate proceedings. No
22		more than 20% (approximately \$311k) of these expenditures would be allocated for
23		program administration, marketing and evaluation purposes. Mr. Hyman also suggested

¹⁷ WR-2015-0301 Rebuttal Testimony of James A. Merciel, Jr. p. 3, 6-17. ¹⁸ WR-2015-0301 Rebuttal Testimony of Mark L. Oligschlaeger p. 10, 21-23 & p. 11, 1.

> the formation of a collaborative permitting any and all interested stakeholders to weigh in on how best to design, implement and evaluate the Company's demand-side programs.

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What was the Company's response? Q.

Company witness Philip C. Wood offered two objections to Mr. Hyman's proposal. First, Α. he states the Company's proposed rate design was not conducive to promoting energy efficiency programs. Second, he states Mr. Hyman's proposed budget appears arbitrary 7 and that the proposal lacks foundation in being able to properly communicate to ratepayers that such a program results in a value is greater than the cost.¹⁹ 8

Mr. Wood offers the first objection could be mitigated with a Commission-approved decoupling mechanism and the second objection could only be overcome if programs were planned, staffed, accessed and communicated to customers in a manner where benefits outweighed costs.²⁰

Does OPC agree? 13 Q.

No. With regard to Mr. Wood's first objection, OPC's position remains consistent with 14 A. what was filed in rebuttal testimony rejecting the proposed decoupling mechanism. 15

> Mr. Wood's second objection echoes concerns raised in my rebuttal testimony that DE's proposal be rejected due to the lack of cost-justification and necessary planning.

What was Staff's response? 18 Q.

> Staff was not opposed to considering such a program in the future, but that further A. dialogue with other parties and a cost-benefit analysis was necessary before supporting such a program.

Staff witness James A. Merciel Jr. stated approval of DE's spending amounts to an approximate annual impact of \$3.30 per customer.

WR-2015-0301 Rebuttal Testimony of Philip C. Wood, p. 4, 19-24 & p. 5, 1-8.

²⁰ Ibid. p. 5, 10-24 & p. 6, 1-12.

Q. Does OPC agree?

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A. Yes. There is no cost-justification presently for a ratepayer-funded energy efficiency program. Continued discussion is appropriate if the Commission feels this topic is warranted. However, Mr. Merciel's preliminary ratepayer impact analysis being confined to only residential ratepayers is inappropriate. Cost considerations for all ratepayers including commercial and industrial should be considered.

7 VII. SPECIAL CONTRACTS

Q. Please summarize the proposal before the Commission.

9 A. Staff witness Busch recommended a review of the contract between MAWC and
10 Triumph Foods be conducted for consideration during MAWC's next general rate
11 increase. Mr. Busch explains:

In MAWC's rate case, WR-2010-0131, the contract was amended and a new commodity charge was established based upon a variable cost component and a margin component. Further, in the Stipulation and Agreement that was filed in the case and approved by the Commission, Highly Confidential Appendix D stated, among other provisions, that the Signatories agree not to request a review of the Triumph Foods contract until after December 31, 2015. As this current case was filed in July of 2015, Staff did not request a review at that time. However, since it is now past December 31, 2015 Staff is requesting a review of the contract be conducted and any changes deemed appropriate will be addressed in MAWC's next general rate proceeding.²¹

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²¹ WR-2015-0301 Rebuttal Testimony of James A. Busch p. 25, 19-24 & p. 26, 1-3.

Q. Does OPC agree?

A. Yes. I reviewed the WR-2010-0131 case, the history behind the Triumph Foods contract,
and the terms of the Stipulation and Agreement and concluded a review is not only
appropriate but long overdue. OPC supports Staff's proposed review to ensure that
Triumph Foods' rate is not detrimentally impacting other customers in the St. Joseph
District, is still providing the agreed to benefits as was envisioned when the contract was
established in 2006, and is still an appropriate and necessary rate moving forward.

8 Q. Does this conclude your testimony?

9 A. Yes.